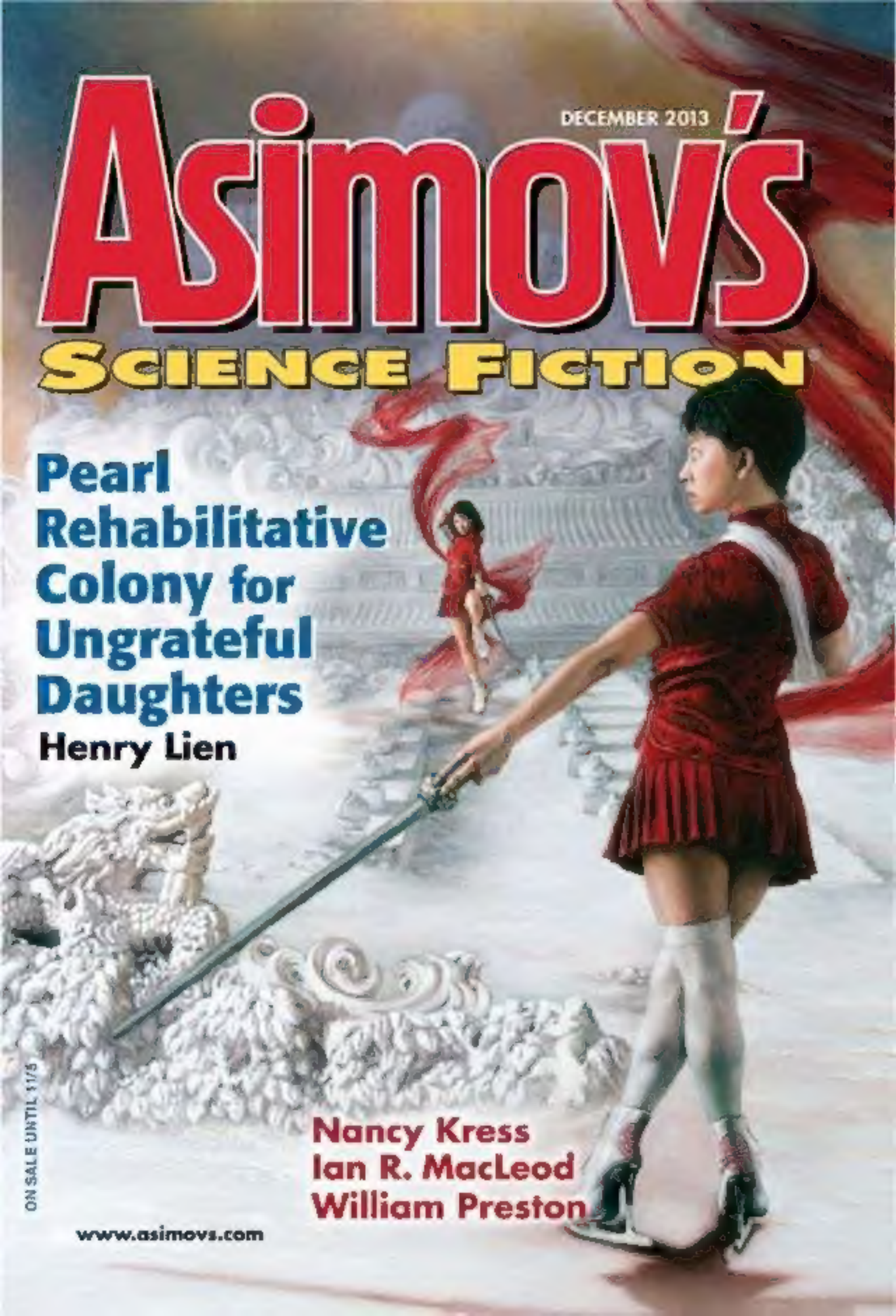
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DECEMBER 2013

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EDITORIAL

Sheila Williams

LIVING IN A SCIENCE FICTIONAL UNIVERSE

Some years ago, when I still toted the print edition of the New York *Times* around the city, there was a cheap little cafeteria/grill hidden away in my local YMCA. Here, I could grab scrambled eggs on a bagel or hamburgers with curly fries and feed my starving children for prices that seemed impossibly low for Manhattan. One morning—as I negotiated the paper and breakfast, while waiting for the Y's summer day camp to start—my daughter and I were approached by a frantic couple. They demanded to know what the day was and refused to believe me when I said it was Wednesday the 14th. Even after I showed them the date at the top of the *Times*' front page, they continued to ask me if I was sure. Couldn't it be Tuesday? Wasn't it the 13th?

They were clearly unconvinced by my assertions to the contrary.

I'm certain there were plenty of mundane explanations for this unusual behavior, but only one theory came immediately to mind. As the man and woman left the cafeteria, I leaned over and whispered to my daughter, "Do you know who *they* are?" When she shook her head, "no," I stated the obvious:

"Time travelers."

Now, it could be argued that they were confused tourists who, having seen as much of America as they could in two or three weeks, had just missed their flight home—but what would be the fun of that?

Meeting time travelers was not my first interaction with the science fictional side of life in New York City. And I'm not talking about the guy with glitter in his hair who played *Twilight Zone* theme music on his saxophone while panhandling on the subway. I'm talking about those moments when reality seems to shift and the SF explanation begins to make more sense than any commonplace rationalization.

In the eighties and early nineties, my husband and I frequented a lovely Mexican restaurant called Tequila's on Columbus. After fifteen years as loyal customers, we were surprised and dismayed to suddenly discover a new restaurant in the same spot called the American Café on Columbus. The Mexican décor was gone, but all the waiters looked the same. Shortly after that, Tequila's on Columbus returned to the exact same place! With the same waiters! Alternate-universe slipping portal, anyone?

Now maybe I should believe the white-haired gentleman who told us the owner had always dreamed of running an American-style café, but really, doesn't that seem like a cover-up to you? It's a lot of work to change restaurants every few weeks! Much more likely that we had chanced upon a location where parallel universes intersected. For years now, the restaurant seems to have stabilized as Cafe Frida's, but I keep an eagle-eyed watch lest it start shifting ground again.

The list goes on. Not long ago, I was crossing 86th Street when I heard the unmistakable pneumatic whine of a time machine. I could have assumed that one of New York's accordion busses was stopping to discharge passengers, but at that very moment I also heard a nervous young woman shout into her cell phone, "Doctor, doctor who?" The bus explanation just does not cover all the variables here.

I am an editor. I know the difference between fact and fiction. I know that if I meet someone on the street who lets me know that he is a citizen of the multiverse and that he's been visited by aliens or time travelers, it is almost certain that he is either telling me a story or is in need of more help than I can give him. Still,

sometimes I can't help pretending that the craziest explanation is the best one.

Generally, though, I leave my tin-foil cap at home and navigate the waters of reality with cool, clear-headed logic. Like all adept science fiction readers, I reserve my capacity to suspend disbelief for those times when I am ensconced with a good book or story. A skillful author will immediately convince me that the next-door neighbor has been replaced by a pod person, the monster lurks behind the rock that blocks the path, and the detective is a robot. In the hands of the artist, it doesn't strike me as incredible that a man shrinks, becomes invisible, or ventures to the center of the Earth. I can't imagine why anyone would question aliens who change gender, students who time travel, or children who are gengineered to be sleepless.

I'm happy that my ability to depart for Arrakis, to bridge the mist at Nearside, or to think like a dinosaur has given me the opportunity to inhabit so many different universes. Of course, I also enjoy works set during ordinary days on Earth. But, no matter how much pleasure I get from reading Jonathan Lethem, Lee Smith, or Toni Morrison, I respond best when they bend genres, ghosts drop in, or an author like Shirley Jackson ensures that my ordinary days come with peanuts.

I love living in a science fictional universe. I love being the zany parent who embarrasses her kids with outrageous explanations for why the world works the way it does and I love being a reader of fantastic literature. I never want to completely trade the possibility of a science fictional universe for an utterly humdrum vision of reality. Scientists have claimed that the universe might be a hologram, that they've identified the elusive Higgs boson, and that the universe we inhabit is, indeed, only one of billions. None of these claims is any less weird than most science fictional assertions, but the last one makes me the happiest. Maybe someday I'll rediscover the portal that brings me back to a universe where I can once again dine at Tequila's on Columbus. ❍

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REFLECTIONS

Robert Silverberg

THE PLURALITY OF WORLDS

A decade ago—it was the column published in the January 2004 *Asimov's*—I wrote an essay titled "Neque Illorum Ad Nos Pervenire Potest," which is Latin for "None of us can go to them, and none of them come to us." The phrase was that of the twelfth-century philosopher Guillaume de Conches, writing about the supposed inhabitants of the Antipodes, the lands that lay beyond the fiery sea that was thought to cut Europe off from the as yet unexplored Southern Hemisphere. I used it to express my belief that we are never going to have any close encounters with the inhabitants of other solar systems. They're just too far away. Despite the best efforts of such people as my friends, the brothers Jim and Greg Benford, who even now are working to drum up interest in an interstellar voyage, the distance even to the nearest star is so great that only by magical means (a faster-than-light drive, for instance) are we likely to get to an extrasolar planet and return.

"It's disheartening," I wrote back then. "I've spent five decades [six, now] writing stories about other worlds and other intelligent life-forms, and I don't like the idea that I've simply been peddling pipe dreams all this time. I *do* believe . . . that the universe is full of populated worlds. I *do* want to know what those alien races look like, how they think, what kind of cities they live in. I'd love to read alien poetry and look at alien sculptures. I might even want to risk dinner at a five-star alien restaurant. But none of that is going to happen . . . The speed of light is going to remain the limiting velocity not just for us, but for all those lively and interesting people out there in the adjacent galaxies, and that puts the kibosh on the whole concept of a galaxy-spanning civilization."

That there are worlds out there for the finding, plenty of them, if only we could find a way of getting to them, and that those worlds are inhabited, is something I have never doubted. The comic books I read as a small boy, seventy-plus years ago, were full of gaudy tales of "Martians" and "Venusians." Then, in 1948, when I discovered such pioneering collections of science fiction as the great Healy-McComas anthology *Adventures in Time and Space* and Groff Conklin's splendid *A Treasury of Science Fiction,* such stories as Eric Frank Russell's "Symbiotica," A.E. van Vogt's "Black Destroyer," and Arthur C. Clarke's "Rescue Party" lit up my adolescent mind with visions of galaxy upon galaxy filled with an infinite number of intelligent non-human beings. The thought of those infinities still stirs me, so many decades and so many stories later, whenever I look toward the night sky.

In my 2004 essay I calculated just how many inhabited worlds were likely to be out there. I figured there were twelve billion stars in our local galaxy alone that were neither too big nor too small to provide the energy that life-forms of our sort require. "If half of these have planets," I wrote, "and half of those planets lie at the correct distance to maintain water in its liquid state, and half of those are large enough to retain an atmosphere, that leaves us with a billion and a half potentially habitable worlds in our immediate galactic vicinity. Say that a billion of these must be rejected because they're so large that gravity would be a problem, or because they have no water, or because they're in some other way unsuitable. That still leaves 500 million possible Earths in the Milky Way galaxy. And there are millions of galaxies."

Half a billion possible Earths in our little galaxy alone? That isn't just a hopeful hypothesis any more. And it may be a very conservative one. In January 2013, scientists at Cal Tech in Pasadena

who had been studying the results sent back by NASA's Kepler Space Telescope offered an estimate of at least 100 billion habitable extrasolar planets just in the Milky Way galaxy—and our galaxy is only one of a nearly infinite number in the universe. They based their findings on a view of a five-planet system called Kepler-32, all of them similar in size to Earth and orbiting their star (M-type, smaller and cooler than our own) closely enough to ensure sufficient warmth. Since there are 100 billion M-type stars in the galaxy and the Kepler findings show planets around many of them, the Cal Tech people believe it's reasonable to think that they average one habitable world apiece—100 billion more or less Earth-type planets, and that's *billion* with a *b*. A billion, remember, is 1000 million. Somewhere in all those billions and billions, surely, dwell the alien beings I was reading about in the thick SF anthologies of the 1940s.

In fact, the whole idea of an inhabited cosmos was anticipated as early as 300 B.C. by the Greek philosopher Metrodoros the Epicurean: "To consider the Earth the only populated world in infinite space is as absurd as to assert that in an entire field sown with millet only one grain will grow." And it was developed most entertainingly in a lively little book, *A Plurality of Worlds* (1686), by the French poet and philosopher Bernard de Fontenelle, which I've just been reading in the elegant English translation that John Glanville produced the following year.

Fontenelle's book is one of the earliest attempts to make current scientific knowledge accessible to the lay reader, and it achieves that triumphantly. It is cast in the form of dialogs set at a French country estate, one per night for five nights, in which a philosopher who was probably very much like Fontenelle discusses astronomy and the nature of the universe with his hostess, a witty and somewhat flirtatious countess who is eager to understand the motions of the planets and stars.

What he sets forth is essentially a picture of the universe as we understand it today—the Sun at the center of the solar system, the planets in orbit around it, their various moons in orbit around them, and the stars an immense distance away, each one a sun in its own right and very likely having planets of its own. In all this Fontenelle risked flying in the face of the traditional Christian belief that the creation of life has taken place only once, in the Garden of Eden, on Earth, and that Earth was the center of the universe. For some fifteen hundred years it was deemed heretical, and downright dangerous, to disagree with that position, until the work of the great astronomers Copernicus, Kepler, and Galileo had shown the Earth is merely one of many worlds surrounding the Sun. As recently as 1633 Galileo had been called before the Inquisition and forced to declare that Copernicus's "opinion" that the Earth moved around the Sun was false. (There is a story, probably apocryphal, that Galileo, after swearing to his denial, turned aside and muttered under his breath, *"Eppur si muove"*—"Even so, it does move!")

In the years immediately following, the Church reluctantly began to accept the notion that Copernicus might have been right and that the Earth was not the center of all creation. Serious speculation about the possibility of life on other worlds became a widespread philosophical pastime. But Fontenelle remained cautious. In his preface he apologized in advance for any offense he might give the religious, and asserted that if the Moon were inhabited, as he supposed, its inhabitants must be products of a separate creation, for "none of Adam's posterity ever traveled so far as the Moon, nor were any colonies ever sent thither; the men then that are in the Moon are not the sons of Adam." The same, he said, was true of the inhabitants of Mars, Venus, and other nearby worlds, all of whom he described in a playful and inventive manner while taking care to say that he was merely spec-

ulating, not claiming any special revelation of truth. ("The people of Mercury are so full of fire that they are absolutely mad; I fancy they have no memory at all . . . and what they do is by sudden starts, and perfectly haphazard . . . As for Saturn, it is so cold that a Saturnian brought to Earth would perish from the heat, even at the North Pole.")

In his discussion of the stars, which Fontenelle, like most people of his time, believed were fixed in the heavens and fastened to the sky "like so many nails," he recognized that they were vastly farther away than the familiar planets: "The fixed stars cannot be less distant from the Earth than fifty millions of leagues; nay, if you anger an astronomer, he will set them further. The distance from the Sun to the farthest planet is nothing in comparison of the distance from the Sun, or from the Earth, to the fixed stars; it is almost beyond arithmetic."

And the stars were suns, he said, shining by virtue of their own fires, not by reflection of our Sun's light. "I will not swear that this is true," he said cautiously, "but I hold it for true, because it gives me pleasure to believe it." And around those distant suns were a multitude of other worlds, each held to its own sun by what he called a "vortex," which in an approximate way equates to what we call a gravitational field. Those planets, he thinks, are inhabited, not by humans but by beings of some other creation. In one of his most delightful flights of fancy he says that in some parts of the universe—the Milky Way, for instance—the stars are so close together "that the people in one world may talk, and shake hands, with those of another; at least I believe, the birds of one world may easily fly into another; and that pigeons may be trained up to carry letters, as they do in the Levant."

All this is set forth lightly, as a mere outpouring of the imagination, but Fontenelle leaves no doubt that he is serious. "When the Heavens were a little blue arch, stuck with stars, methought the universe was too strait and close," he wrote. "I was almost stifled for want of air; but now it is enlarged in height and breadth, and a thousand and a thousand vortexes taken in; I begin to breathe with more freedom, and think the Universe to be incomparably more magnificent than it was before."

And now we have proof, thanks to NASA and the Kepler telescope, that that multitude of worlds that Fontenelle imagined more than three hundred years ago is really out there. The trouble is that we can't reach them, because the speed of light is likely always to be the limiting velocity not just for us, but for all the inhabitants of those other galaxies, and, barring the development of some quasi-magical means of faster-than-light travel, that makes the idea of intergalactic contact improbable.

So, as I said a decade ago and am forced still to believe, there won't be any Galactic Federation; there'll be no Bureau of Interstellar Trade; no alien wines or artifacts will turn up for sale in our boutiques. Nor will we meet the real-life equivalents of George Lucas's Wookiees, Doc Smith's Arisians, Fred Pohl's Heechees, Larry Niven's Kzinti, or—just as well, perhaps—A.E. van Vogt's terrifying Coeurl. The aliens exist, I'm sure, but the sea that separates us from them, and them from us, is just too wide. And as Guillaume de Conches said in a different context, long ago, "Nullus nostrum ad illos, neque illorum ad nos pervenire potest." None of us can go to them, and none of them come to us. ❍

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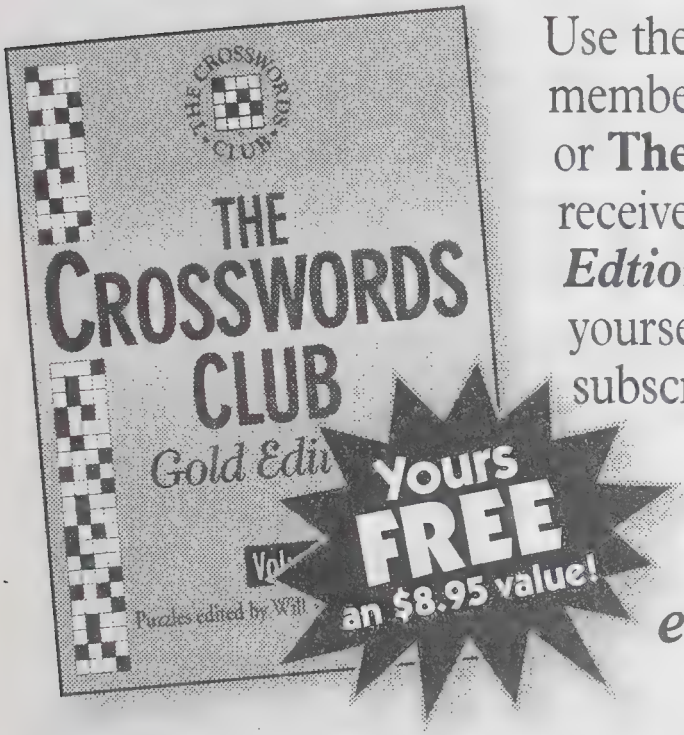

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PEARL REHABILITATIVE COLONY FOR UNGRATEFUL DAUGHTERS

Henry Lien

Henry Lien was born in Taiwan. He studied International Relations at Brown University, attended UCLA Law School, practiced law for ten years, embarked on a career as a fine art dealer in Los Angeles, and also began teaching university courses. At forty-two, Henry finally snapped, came out openly as a sci-fi/fantasy geek, and attended Clarion West in 2012, where he developed the world of Pearl, which will continue in his upcoming novel *The Taming of the Pearl,* the first of a trilogy. Henry also wrote and recorded "Ready to Launch," the campy space opera class anthem of Clarion West 2012 (visit *www.henrylien.com* to view the performance). Henry dedicates his first sale to Chuck Palahniuk, who workshopped this story with Henry at Clarion West and who taught him a lot about heroes.

I am called familial name Jiang, personal name Suki, although I prefer to be referred to as Her Grace, Radiant Goddess Princess Suki, and I think that this is the stupidest essay ever assigned and I think that Pearl Rehabilitative Colony for Ungrateful Daughters is the stupidest place under Heaven.

You wish us to write this essay about what we have done and learned during our sentence here at Pearl Colony. You have "Wicked Girls Return as Good" carved over the entrance gate. You think that girls can be humiliated into excellence. You think that we can be shamed into preparing for the examination for Pearl Opera Academy next year by making us say that we are lazy and ungrateful. Think whatever you want. I do not have any "acts of undutiful disrespect of my Honorable Parents"

to confess in this essay because my parents were stupid to send me here. Piss me off to death!

Even if they had wanted a boy. Even if I was adopted. If they did not want me, they could have just thrown me away with the kitchen trash instead of sending me here to be tortured to death.

I want to go home.

Except my stupid, stupid parents are there.

I miss my cat. I fear no one has been tinting her fur while I have been gone.

Most of all, I miss my hair. Aiyah, I think I am going to cry again. My beautiful hair. My legendary hair. And all you nuns were so mean to me when you cut it off.

"You are not going to cut my hair," I say to the nuns.

"Mistress Suki. Your parents have sent you here so that we can save you from your own undutiful nature. You shall learn to obey so that you can learn to excel. And we shall cut your hair."

Half the girls have gone through the line and all submitted to having their hair amputated by the nuns without fighting back.

I say to the nuns, "I have my hair massaged and dressed twice each month at the most high-grade beauty sanctuary in all of Tsukoshita Bay by a former first assistant to the second personal lady-in-waiting of the Empress Dowager." And they think I am going to permit them to touch my hair? Make me die of laughing! "You are just a bunch of ugly, talentless nuns who hide here because you could not survive in the real world."

"Aiyah!" they cry. "How dare you say such things to your elders, you wicked, ungrateful girl?"

"Is that not the sort of thing that wicked, ungrateful girls say?"

"Aiyah!" they all gasp. "You shall learn your place, wicked one!"

All of the girls are looking away from me. Except one girl. What is she staring at?

As the nuns come at me, I prepare to enter combat position and I dig the inner edges of my skates in. The surface of the pearl under my skates feels a little too grippy. They think that the pearl here at Pearl Colony is high-grade pearl, but it is just common road-grade pearl, as sufficient for skating on as any other street or handrail or rooftop in the city of Pearl, but really unacceptable for fighting on. The entire miserable campus of Pearl Colony is made out of this cheap road-grade pearl. Why do they even bother? They might as well just make buildings out of cut rocks and tree slices like primitives used to before they discovered the pearl, or like out in Fallen-Behind places like the Shin mainland.

The four nuns prepare to encircle me. However, they are not Academy-level practitioners of Wu-Liu. Since no other form of Kung-Fu is performed on bladed skates, any weakness in either skating training or combat training leaves you full of weaknesses in the combined art form of Wu-Liu. I can see just from how the nuns shift their weight that none of them received equal training in both skating and combat.

They skate in a circle around me, tighter and tighter, hoping to rein me in like a frightened animal. The wrong technique, as this leaves their wall of defense no stronger at any point than one person deep.

I prepare to skate with full force into one of the nuns, and enter into position to perform the two-palm lightning butterfly block chop. As she sees me charging her, the old turd crouches down into position to perform the incredibly stupid five-point fire chicken move and I am laughing so hard, I almost lose hold of my position. Make me die of laughing! I change the energy flow of the nun's ridiculous pecking hand and use the fulcrum of her elbow to send her hand slapping against her own shoulder.

I break out of the circle and cartwheel into a double-toe flying jump. I land onto a

curved, ornamental retaining wall made out of the pearl and skate along its top away from the nuns.

Behind me, the four nuns leap onto the wall one after another. They skate in pursuit on the top of the undulating wall behind me in a line, rising and falling with the rhythms of the wall like a New Year's dragon. A slow, ugly New Year's dragon. Do they really think they can ever catch me?

But then, behind them, I see someone. She is skating hard. From the way that she balances on one skate and pushes behind with the other skate, I can tell that this girl has received proper Wu-Liu training and that she is not without talent.

It is the girl who was staring at me in the line for the hair amputations, with the long, straight hair like a waterfall and the stinking expression on her face. As she catches up with the train of nuns, she extends her arms straight out. She knows the lightning lotus forward flip! This girl has received some serious Wu-Liu training. I see her cantilever and flip on the axis formed by her own arms and sail over the entire train of nuns to land in front of them.

As she closes the distance between us, she begins to do one lily pad forward flip after another, building her momentum and gathering her center of Chi. Pump, flip, glide. When her center of Chi is fully gathered, she unleashes it into a seven-fingered somersault flip. She catapults over my head and lands in front of me.

I reach out and grab her long length of waterfall hair as she lands. Wah! Her hair is silky and beautiful. It is hard to get a grip on it, as it feels like it was dressed with whale placenta extract. This girl must come from money.

The girl's fist shoots out and twists itself into my hair. Aiyah, she is going to crease it! In the distance, I see the four nuns skating in a line toward me, like some evil, brown sea serpent. The one in the lead has a sword drawn.

"Why are you doing this to me?" I cry at the girl with the waterfall hair. "Who are you?"

The girl does not answer.

"They are going to cut your hair, too!" I scream at her. "Why are you helping them?"

"Because you talk too much," says the girl with the waterfall hair.

We continue to wrench each other's beautiful hair, neither of us releasing our grip. Aiyah, I am crying thinking about all that beautiful hair being creased but it is as if she does not even care! Then, when it is clear that neither of us will gain the advantage over the other, the girl pushes me as far away as my grip on her hair will allow. With her hair stretched between us, she does a strange sort of twisting single-toe flip that I have never seen before and *uses the blade of her own skate to cut through her own hair.* It makes a sickening sound as it cuts through, half creak and half crunch, as if I had just skated over somebody's arm. She twists free of my grip. I am holding her length of beautiful hair that must have taken ten years to grow and thousands of taels to dress, and I am so shocked and sickened by her mutilation of herself that I drop my defense.

In that moment, she whips me in a half circle by my hair and sends me sliding into the four nuns. They grab my limbs and, with one ringing swing of the sword, amputate my beautiful, legendary hair.

Aiyah, why me? Why me? Why me? I want to die.

But first, I must have my revenge on this evil, evil girl.

I learn that the evil girl who helped the nuns to amputate my beautiful hair is called familial name Liang, personal name Doi. Her father is Chairman of New Dei-Tsei Pearlworks Company. They live in a compound at the top of Dowager's Peak.

It turns out that Doi Liang was in fact Baby Swan Doi. Of course! When she was ten years old, Baby Swan Doi became the youngest person ever to win first place at the Season of Glimmers Pageant of Lanterns Wu-Liu Invitational. Her short routine,

"The Dragon and the Swan," became a sensation because of the interplay between the train of taiko drummers on skates thundering after her and her little fluttering swan moves to evade the dragon. But people say she ran into some "trouble" and disappeared from view and no one has heard anything about her in the last four years.

Doi Liang's parents probably sent her to Pearl Colony to clean her up and stage a comeback so that they can make sure she passes this year's examination to get into Pearl Opera Academy to properly complete her Wu-Liu training.

I suppose that some people might think that she is a little bit more beautiful than I am, but her mouth is too wide and her complexion has exactly zero radiance. Also, she is always looking down at the ground, so you cannot even tell if her eyelids are monolid or duolid.

By the end of the day when they amputated my hair, I have gotten all twenty-four girls enrolled at Pearl Colony to make vows of sisterhood with me to take down that Doi Liang and get her kicked out of Pearl Colony at all costs. No one likes a traitor.

If Doi Liang gets kicked out of Pearl Colony, there is no way that Pearl Opera Academy will ever accept her. Not with an expulsion on her record. She will never perform legitimate Wu-Liu again. She will never get cast in a role again, except in some variety show production called "Has-Beens of Wu-Liu" or "Nobodies on Skates" or else some topless skating chorus in a saloon in Cleanside.

But the question is how can we get her kicked out of Pearl Colony? Normally, girls get kicked out for smoking sinkweed or violating curfew or getting caught with boys in their rooms, but this one is so uptight she probably wipes her ass with lace scarves.

On the first day of class, we are presented with the perfect way to get that Doi Liang kicked out. When we assemble on the training court on the first day, we are all devastated to see that our Wu-Liu instructor is Sensei Madame Tong. She is an instructor at Pearl Opera Academy. However, she also wrote that ghastly parenting guide *How to Raise Dutiful, Successful Children the Traditional Imperial Way* that has been giving our parents stupid ideas. Piss me off to death. How am I going to survive three months under her rule?

However, the lesson system and grading plan that Sensei Madame Tong sets forth for us that first day give us the perfect path to get that Doi Liang kicked out of Pearl Colony.

"Wicked, ungrateful daughters," says Sensei Madame Tong. She would be beautiful if she did not purse her lips so much.

"Question: What is the greatest cause of all evil in this world? Answer: Undutiful children.

"Question: What is the greatest joy that a person can have in this life? Answer: To show respect to one's esteemed parents.

"As we start our first day of lessons at Pearl Rehabilitative Colony for Ungrateful Daughters, let us remember the story of young Mei-Ching the Dutiful, who, when her parents were too old and weak to work, chopped all the trees on the mountain where they lived to give them firewood, then cut off her own head to make soup to feed her parents.

"You shall be subject to a Motivation at the end of each of the three months of this term. The Motivation is an examination to make you all perform your best and place as high in the rankings as you can. You shall be ranked from first place to last place based on your performance during the Motivation.

"Your final rankings after all three Motivations shall be taken into consideration when you take the entrance examination for Pearl Opera Academy next year. Further, after each Motivation, the girl ranked in last place shall be expelled, as a reminder to all of what happens to lazy, ungrateful girls with no virtue or excellence."

All of us girls start whispering in excitement to each other, and then we all look at that Doi Liang. We will seize every opportunity when Sensei Madame Tong is not looking to sabotage her and take her down and get her kicked out of Pearl Colony.

On that first day, Sensei Madame Tong starts us with three hours of basic tan-toe kicking and drills. No toilet breaks.

At the end of the three hours, she allows us to rest for five minutes. We can choose to either rest or rush back to the dormitory compound to try to use the two toilets there.

Then she has us immediately start with six hours of jumping drills. At the end of the first three hours, we are allowed a five-minute break, but instead of allowing us to rest, she makes us kneel directly on the hard pearl, with our skates on, and listen to the nuns recite poems from the twilight of the Zhang Dynasty of the empire of Shin. They mumble on and on about how the empire was brought down not by the floods following the Great Leap of Shin, but as Heaven's punishment for all the ungrateful children in the empire.

Several girls pull muscles during the last three hours of jumping drills. One girl even slips on a triple jump and falls, cutting her leg with her own skate. We all rush to help her, but Sensei Madame Tong does not permit us. She says the girl has dishonored her parents and wasted their money by failing in front of her Colony mates and she should be made to feel the full force of her shame so that her parents get their money's value.

At the end of the last hour of jumping drills, Sensei Madame Tong has the Shinian servant girls skate out with our dinner, a bowl of wakame miso soup with a scoop of rice dropped in it. She announces that only girls who are able to successfully do a combination triple scissor kick quadruple spin will be allowed to eat. And we each get only one try.

Only a few girls manage to do the combination triple scissor kick quadruple spin on the first try. I am one of them. Two of the others who succeed are sisters, Chiriko and Yoneko, whom I already knew because their parents are friends with my parents. I think it was their parents who gave my parents a copy of Sensei Madame Tong's book, though, and gave them the idea to send me to Pearl Colony. Piss me off to death. But then they were among the first to agree to help me get Doi Liang kicked out, so then we became very close friends again.

Also, another girl named Lin-En did the combination move successfully. Her father is a high-ranking bureaucrat in the Tariff Blockade Ministry. Sweet girl. She seems to want to become friends with me very much. She is not talentless, which is a good thing, since no one is going to give her a role based on her face.

And also that girl Doi Liang. She also did the combination on the first try.

Sensei Madame Tong makes the five of us eat our bowls of soup in front of the other girls, who are denied any dinner. When we have finished, Sensei Madame Tong orders the Shinian servant girls to take the uneaten nineteen bowls of soup and empty them into the ocean. Then we are sent to bathe and go to sleep.

We thought that that miserable first day was just Sensei Madame Tong's way of scaring us, but no. That first day was just the beginning of a month of terrible days.

At the end of each day, Sensei Madame Tong tallies the points of all the girls made during the jumps for the day. She continually adjusts our rankings based on our performance and posts them outside the principal skating court.

The top five rankings never change day to day. I am ranked first, of course, and Chiriko and Yoneko are ranked third and fourth, and then sweet Lin-En is ranked fifth.

That Doi Liang also ranks pretty well. Too well.

* * *

At the end of the first month, we face the First Motivation. Sensei Madame Tong reveals the full depth of her evil by making us take a twelve-hour Motivation. For the first eight hours, we do endless competitions testing kicking, jumping, spins, free hand combat, footwork routines, short weapons combat, and long weapons combat. For the last four hours, we are tested on combining these skills with lyrical skating and carving figures into the pearl with our skates.

At the end of the First Motivation, the results are no surprise. In the top five positions, I am first, Chiriko and Yoneko are third and fourth, and sweet Lin-En is fifth.

And that Doi Liang is ranked second.

The pretty, fair-skinned girl with the big eyes is ranked last. As we watch her pack up her belongings and leave the colony in failure and shame, my heart is filled with a thousand strains of sorrow and tears roll down my face because it is not that Doi Liang that is getting kicked out.

I cannot just stand aside and do nothing about this. I have to do something. We all have to do something.

At the beginning of the second month at Pearl Colony, Sensei Madame Tong tells the remaining girls that we will spend the next month preparing for the Second Motivation, the Imperial Tea-Service test.

The Imperial Tea-Service test requires you to take a little teacup filled with hot tea. You are required to skate a circuit atop the perimeter wall encircling the campus of Pearl Colony without spilling the cup of tea. Everyone is ranked by how quickly they complete the circuit. However, if you come back without at least half a cup of tea left, you fail.

When Sensei Madame Tong has finished explaining the rules, all the girls look at me, and then we all look at that Doi Liang.

This will be easy. During the Second Motivation, we will all attack Doi Liang when Sensei Madame Tong is not looking and knock the tea out of her cup, causing her to fail the Motivation.

The second month turns out to be far more difficult than the first. We train for fourteen hours each day. We have not only to practice all the moves that we trained during the first month. We must also learn the architecture of the perimeter wall that we will be skating on during the Second Motivation. We must learn how to navigate the towers, turrets, and minarets that break the wall, and how to use adjoining rooftops and balconies to avoid the obstacles and overtake each other, since the wall is only one skater wide. And we must learn to keep our cups in such perfect balance during all of these leaps that we do not spill the tea in them.

On the day of the Second Motivation, we are all lifted up in joyful anticipation of the opportunity to take out that Doi Liang. We take our cups of tea and form a pack at the starting line.

Sensei Madame Tong counts down. "San. Ni. I. Let fly!"

We all burst and flip or cartwheel onto the perimeter wall and set off. Because the perimeter wall is only wide enough for one skater at a time, we all must follow along in a line. However, you can sprint when you skate past the rooftop of an adjacent building and do a diagonal three-point skid-step to pass somebody.

Doi Liang keeps trying to pass the skater in front of her and move to the front of the line. However, we anticipate her moves and we work in unison against her like a school of fish.

When we skate to a point that is blocked from Sensei Madame Tong's view by the natural geography of the campus, we all let loose with our combat moves at Doi Liang, trying to make her spill her cup of tea.

She is taken by surprise at the assault from ten sides. She performs quite well considering all those arms and skate blades coming at her.

She quickly changes to the Pulling Hands technique, grabbing the girls' limbs as they come at her, using the forward motion of their moves against them, and turning sideways to let them fly past her. The girl is not talentless, I must say that.

But she is no match for so many girls. She is blocking off four girls who have stopped curbing their kicks and appear to be aiming open blades at her. If they are going to be using illegal moves on Doi Liang, I cannot stop them.

Then, as Doi Liang passes the rooftop of the dormitory, little Lin-En skates up from the left side and slaps Doi Liang's cup of tea. Good girl! It flies up in the air. Lin-En ends up skating right through the cloud of tea droplets, which stain all over her uniform robes. But at least we have succeeded in our mission. For Doi Liang snatches her teacup as it tumbles in the air and it is completely empty.

As we skate into view of Sensei Madame Tong again, I see that not only have I made Doi Liang come in last place, I am going to come in first place.

See. Do not underestimate Her Grace, Radiant Goddess Princess Suki. No one will shame me. No one will deny me. As I streak down the finish line in first place, I sing out triumphantly,

"No dutiful daughter am I!

"No father or mother ruled by!

"Behold me, for I am the Radiant Goddess!

"I fly up and rip down the sky!"

I finish first, Doi Liang is right behind me but with an empty teacup, then Yoneko, then Chiriko, then Lin-En.

I am glad to see that sweet Lin-En managed to place in the top few places again. For some reason, I am cheering for that girl. I skate over to her and say, "Keep skating like that and when we get to Pearl Opera Academy, I will start a sisterhood and you can be my first lady in waiting." From the look of happiness on her face, you would think that I just gave her a gift of the moon. Sweet, open-hearted girl.

When all the girls have crossed the finish line, it turns out that everyone finished with their cups at least half full except for Doi Liang. I figure that that means that she places twenty-third, dead last in this Motivation, and she will be expelled! I am overcome with joy.

"What happened when the rise of the hill obscured all of you from my view?" asks Sensei Madame Tong. "Mistress Lin-En. Why is your uniform covered with tea?"

Lin-En cries, "Doi Liang fell in front of me and spilled her tea on me."

Sensei Madame Tong's neck and face fill with color. "Do not lie to me, worthless, shameful girl! Doi Liang has not fallen once during these weeks of training."

Lin-En begins to stutter and protest, but Sensei Madame Tong turns instead to Doi Liang.

"Mistress Doi. Did you fall and spill your tea?"

Doi Liang is silent, then finally answers in her low, hoarse voice, "No."

"Did Mistress Lin-En slap your teacup out of your hand?"

Doi Liang does not look at Sensei Madame Tong. She does not look at Lin-En.

She looks straight at me.

She says, "Yes."

"Mistress Lin-En," says Sensei Madame Tong. "Go pack your things. You are expelled."

Brave Yoneko skates to the front of the group and protests. "You cannot do that to Lin-En! You have no right to just disbelieve her!"

I have never seen an adult turn so furious. "You are expelled, too, Mistress Yoneko! For disrespect to a Sensei. Now get out of here!"

* * *

That night, after Lin-En and Yoneko are escorted out by the evil nuns, we also learn that Sensei Madame Tong calculated the rankings in a different way from how I thought. After expelling Lin-En and Yoneko, twenty-one girls were left. Thus, Doi Liang's finishing last means that she finished in twenty-first place. However, that combined with her second place ranking in First Motivation means that she averages out to between eleventh and twelfth place overall. Not last place. And not expelled. Instead, the tall girl with the beauty mark on her chin averages in last place and is expelled.

Piss me off to death. The girls all want to make Doi Liang pay for what she did to Lin-En and Yoneko and they want to enjoy watching her pay.

But I know it was not Lin-En and Yoneko that she was trying to hurt. It was me. And she succeeded.

Poor Lin-En. We were becoming friends. And she slapped Doi Liang's teacup to get revenge *for me.* Now she is going to pay with her career. There is no way that she is going to get into Pearl Opera Academy with an expulsion on her record, especially for cheating and lying to a Sensei. Such a waste of talent. And what is she going to do with her life now? The world is not a kind place for homely girls. I should know. It is people like me that make it so. Ah, poor Lin-En!

And poor Yoneko! She was only speaking up for Lin-En, as I should have. But did not. And now her career is ruined, too. And she comes from an important, public family. Oh, how they will punish her for the shame she has brought on their public face.

If I accomplish nothing else in this life, I will at least see that that Doi Liang is destroyed.

For the next two weeks, I look for opportunities to sabotage Doi Liang without breaking any rules myself, but there is no opportunity since there are no tests until the Final Motivation at the end of the month. For the entire time, we only practice pairs Wu-Liu.

We are surprised at how long this training lasts. We all hate it. It is very difficult work because you have to be careful not to strike or kick your partner with your skate blades, while learning to use her as a second pair of arms and legs, while taking on an opponent. None of us is feeling very confident about how we would test in pairs work right now.

Except for me, of course. I am equally trained in single and pairs combat. I am skilled in all twelve of the zodiacal pairs moves, in either head or rear position.

The only small beacon of joy during this time is that that Doi Liang is doing horribly! She tore a cord in one arm defending herself during the Imperial Tea-Service examination and has had it in a sling ever since. Watching her have to work so hard during training to reroute her Chi around the injury and watching her Wu-Liu suffer terribly for it fills my heart with peace.

Sensei Madame Tong is furious at our lack of progress in pairs work. After two weeks of nothing but pairs drills for twelve hours each day, she gathers us on the training court for a speech.

"Worthless Girls of Pearl Rehabilitative Colony. Your performance in pairs Wu-Liu has been disgraceful. If I were you, I would beg my parents for permission to commit ritual suicide out of shame for how I have disgraced my ancestors with my laziness and lack of excellence. You are all of you selfish, conceited girls. None of you has learned anything about the virtue of teamwork.

"There is going to be a change to the grading system. For the rest of the term, you shall work only in pairs. For the Final Motivation, each pair shall receive one grade, so that every girl's grade shall be tied to her partner's.

"You are all allowed to choose your own pairs partner. Choose wisely."

There is much chittering among the girls at this. You can imagine all the drama and possibility for wounded feelings this will create.

"One exception to the right to choose. It is clear from the Second Motivation that none of you shall choose Mistress Doi Liang as a partner. Yet, she needs a partner, so Mistress Doi Liang has the right to choose anyone she wants as her partner."

All eyes turn to Doi Liang.

Doi Liang looks at Sensei Madame Tong.

Then Doi Liang turns her head and looks straight at me.

No. no. no.

No. oh. no. no. oh. no. oh. no. oh. why. oh. why. oh. why me?

Why me, why me, why always, always me?

Aiyah! I want to die.

Doi Liang raises her one good arm, points a finger at me, and says, "Her. I choose her."

That night, I write a letter to my father and my mother.

"Esteemed and Honorable Parents,

"I know you think I am a worthless daughter, but how could you send me to such a stupid. stupid place? Why did you not just tie me in a bag and throw me into the ocean when I was born? I know you wanted to, because I was not born a boy. Tell me the truth. I was adopted, was I not? I always knew it. That is why you never loved me. no matter how gentle and sweet a daughter I was. But even if you never loved me. you did not have to send me to a stupid place like Pearl Colony to be horribly tortured to death like an animal. I hate it here, but not as much as I hate you. I hate you, I hate you, I hate you.

"Your Worthless, Unloved, Female, Adopted Daughter, Suki."

How am I going to survive this term at Pearl Colony? My first place ranking combines with that Doi Liang's eleventh place ranking so that it averages out to somewhere around sixth place. The evil nuns keep saying that the brutal training at Pearl Colony prepares all girls for the examination to get into Pearl Opera Academy, but everyone knows that no one but the top two or three finishers here ever get into the Academy.

And with her stupid crippled arm, how are we ever going to complete the Final Motivation successfully? It was fun to watch her struggle during training to compensate for the injury and try to perform the moves with only three fourths of her limb strength. We all loved watching her fall and splatter flat on the pearl again and again as she tried so hard to reposition her center of Chi to balance out the injury. We all laughed so hard and it was beautiful, but now it is not funny any more. Piss me off to death.

Also. this girl is dangerous and insane. And she hates me for no reason. I am afraid that it might be more important to Doi Liang to see me get kicked out and to ruin my career than for her to save her own career. What would it matter to her? She will never again be as famous as she was when she was Baby Swan Doi. She was already used up at ten years of age.

We train in the twelve zodiacal animal pairs moves. For moves where one skater plays the head and one skater plays the rear of the animal, there is always a silent struggle between that Doi Liang and me about who will play the head, but she always yields.

The side to side pairs moves are easier with her, but I hate having to hold her cold, rough hand, and we keep having to modify the moves to accommodate her stupid injury.

Two days before the Final Motivation, Sensei Madame Tong announces that she is going to have us fight against actual Pearl Opera Academy students at our Final Motivation. Aiyah, we are so unready for this.

On the last day before Final Motivation, Doi Liang and I are training in the Swinging Monkey routine together. During the entire final week, she has said nothing to me. Not one word.

As we practice racing along the perimeter wall of Pearl Colony, I finally grow tired of her silence.

"Why do you not ever talk?" I say. "What is wrong with you?"

She says nothing.

I say what I suspect is going to be a sore spot, to try to provoke a reaction from her. "Everyone knows why you disappeared for four years after you got famous as Baby Swan Doi." Actually, I am still working on learning exactly what the trouble was that she got into that made her have to hide from public view all those years, but I figure that it is worth a try. "You and your parents think you were so clean in covering it up, but everybody knows. I cannot believe you do not realize that. We all talk about it and we all think it is just disgusting."

No reaction. "But what does it matter now? You are much too old and used up to perform 'The Dragon and the Swan' ever again. You will never be limber enough again to do that little swan move where you grab your skate behind you and spin like a blossom. Which was a vulgar little gimmick anyway."

Still no reaction. Piss me off to death. I have to be more creative. "I know about your brother."

She does not look at me.

"I know what you are thinking," I say, making it up as I go. "Your mother had a difficult pregnancy with twins. And you know that if they had had to choose one twin to sacrifice to save the other, you would not be here, would you. See, there is nothing about you that I cannot see." I shoot this arrow into the air to see where it will land.

She still says nothing. She still does not look at me. However, I can tell that she is not looking at me only through great self control. I can see these things.

"Well," I say, "do not think that you have some special right to act so tragic just because of that. My parents wanted a boy. And I think that I was adopted. But you do not see me going around feeling sorry for myself about it."

Aiyah, just thinking about it makes me start to cry. It is so unfair. Why me? When all I have ever wanted was for them to treat me like a human being, not some worthless embarrassment.

As we skate toward the central minaret in the middle of the perimeter wall, we begin swinging each other in half-moon sweeps and passing the fulcrum of our collective Chi back and forth between us. I hate having her evil Chi in my body, even for a moment. As we approach the minaret, we press our bodies together. We launch our bodies off into the space to one side of the minaret. We whip in orbit around each other like a pair of thrown nunchaku, but we wobble because of her stupid injured arm throwing us off. The centripetal force is barely enough to arc us around the minaret and land us on the other side.

As we land, Doi Liang says, "Do not be stupid. It cannot be both."

I am so surprised to hear her speak that I say nothing.

She continues in that low, hoarse voice, "If your parents wanted a boy, why would they have adopted a girl? They are certainly rich enough to adopt a boy if they wanted. Either they wanted a boy, or you are adopted. It cannot be both."

I am stunned by her outrageous presumption. How dare she bring up my private family matters.

* * *

That evening, I keep thinking about that Doi Liang's words. "If your parents wanted a boy, why would they have adopted a girl? Do not be stupid. It cannot be both."

My face grows hot again thinking about her daring to talk about my private family matters.

But I cannot stop thinking about her words. "It cannot be both." If my parents were rich enough to adopt a boy . . . either they wanted a boy and I am not adopted, or they did not want a boy, and they adopted me.

Who is this girl to be trying to twist my mind? So arrogant! So unfeeling!

Yet, somehow, I am not as angry about it now as I was this afternoon.

It must be because I am exhausted from the week's training.

When the Final Motivation begins, we see that there are eight students from Pearl Opera Academy. Three pairs of girls and a pair of boys. Each pair representing a different difficulty level. We get to choose which difficulty level we want to attempt, and the boys are the highest difficulty because they are boys. And third year boys!

Most of the girls choose to fight against other girls. We all trained with the assumption that the pair we would have to defeat is girls, and all the girls have been training in moves that are focused for girl to girl combat.

Then, one brave pair of girls chooses to fight the Academy boys. So stupid of them. They find themselves unable to use their all-girl pairs moves to knock the boys off their skates and make them fall down. They make the mistake of flinging themselves directly at the boys. I watch them get knocked down by the boys before even completing one circuit of the perimeter wall of Pearl Colony. Stupid girls, why did they not lead the boys off of the campus and into narrow streets in the city? Combat on an open plane does not take advantage of girls' flexibility over boys. Sensei Madame Tong never said that we must limit the combat route to the campus.

Another pair of girls goes next and they choose to fight the pair of second year girls. After them, it will be our turn to skate. We still have not been able to eliminate the wobble in our combined center of Chi to compensate for Doi Liang's arm, especially when we are passing the Chi between us. And even if we could, how can I know whether she will go insane again just to take me down?

"You are better than they are," I say to her. "You want to win this. More than you want to take me down."

She says nothing.

But I see that I have struck a Chi point. I press all the way in. "You have people you want to say something to with this. So do I. If we win this, I will not have helped you and you will not have helped me. I will have advanced myself. You will have advanced yourself. It will just have happened at the same time. That is all."

She turns to look at me.

"Deal?" I ask her.

She says nothing. She looks at the boys. They are lazing about as if none of this cost them the least effort.

"What do I get out of it?" she says.

"What do you mean what do you get out of it? You get to win! You get to hold on to your chance to get into Pearl Opera Academy! You get to not lose face! You get to not shame your parents."

She says in that weird, low voice, "What makes you think I do not want to shame my parents?"

Oh, no, not now, she is going insane again. "What do you want, you crazy girl! Tell me what you want!"

"If we win," she says slowly, "then you have to keep your mouth shut for a whole day."

"What do you mean keep my mouth shut? What a stupid thing to say. Are you insane?"

"And if you break the promise, I get to grab and crease your hair every time you speak."

"Fine! Whatever! Just do not mess this up."

She makes me write down and sign the promise and rolls the scroll into her skate. She is so weird. "So do we have a deal?" I ask.

"Deal," she says.

It is our turn. Sensei Madame Tong asks what difficulty level we choose. Without looking at each other, Doi Liang and I both point to the boys.

We join the pair of Academy boys and take our position behind them on the top of the perimeter wall.

They crouch in position to burst away from us.

We assume the position to chase after them and prepare to unleash a Warring Sisters move at their backs like the other girls did.

Sensei Madame Tong lifts the trumpet of whale bone to her lips.

The clarion call sounds.

The boys bound away from us along the perimeter wall in a flurry of powerful lunges.

Instead of chasing after them, we turn the other way and hop over to a parallel aqueduct leading out of the campus of Pearl Colony and skate as hard as we can into the city of Pearl.

We hear the cries of surprise behind us. We see the boys half a li away from us realize our sabotage. They scrape to a stop, do one-footed backflip half-turns, and come pumping toward us. Sensei Madame Tong and the remaining girls also skate in a flock to follow us and see what will happen.

The aqueduct we are skating on opens onto an elegant waterfront garden district and twists toward a half-moon bridge arching over a sculpted, false canal. We ride the aqueduct as it slopes down, approaching the bridge, then leap off in a powerful combination single-toe double-heel spin onto the bridge and into the little tea pavilion there.

The boys bear down hard toward us. As the aqueduct slopes down, they both fling themselves into a triple axel scuttling scissor blossom spin, aiming their skate blades at us.

Before they reach us, we do a double-toe roundhouse and spring off at an angle. The boys speed after us as we lead them into in a forest of close, tall alleys, deep in a fashionable residential district.

We skate down the alleys, whipping to the left and the right into side-alleys to try to lose the boys and double-back on them, but they keep up with us.

We lead them into a long straight lane of slender townhouses leading toward the waterfront. We see the glimmer of light on the water of Aroma Bay in front of us at the end of the lane.

Ah, but our center of Chi still wobbles! Piss me off to death. She is trying, but we cannot stabilize the Chi.

The boys pump hard toward us and crouch down, forming the Charging Ox position. When they have gathered their Chi, they spring at us.

When we hear their skates leave the pearl, Doi Liang and I entwine our arms together so that we join into a position with no arms and four legs. She winces as I grab her crippled arm, sending a wave rocking through our Chi, but we hold on to it. At the last possible moment, we get it right and execute the Leaping Rabbit pairs move and leap up out of their way.

The boys attempt to reposition and aim up toward us, but they are unable to lock onto us as our trajectory wobbles. The unstable Chi is helping us! Like the Drunken Hen move, our random lurches are as unpredictable to our foes as to us.

As the boys slide under us toward the bay, they struggle to untangle from the Charging Ox position, but in this narrow residential lane, they cannot burst apart out of the position as they are trained to do and they used too much force in too small a space.

As they slide toward the bay, Doi Liang and I change in mid-air from the Leaping Rabbit position to the Charging Ram position. We curl our arms to form the ram's horns and channel the rest of the Chi from our downward trajectory to batter into the boys.

Our impact, the remaining Chi from the boys' Charging Ox move, and the boys' own weight combine. The momentum is too much for them to stop in time. We send them crashing through a grove of false cherry blossoms planted by the water. They go flying off the edge of the boardwalk in an explosion of pink petals straight into Aroma Bay, ending in two splashes so far away that they look like little plumes of dolphin spray.

As soon as we see that we have defeated the boys, Doi Liang and I untangle our limbs and push each other away as fast as we can.

Sensei Madame Tong and all the other girls catch up with us. They gaze in astonishment at the third year Academy boys in the sea, swimming back toward us. The girls look at each other and then bow to us. Doi Liang bows back to them as if they were honoring her. Her! Make me die of laughing!

Then that Doi Liang bows to Sensei Madame Tong, reaches into her skate, and gives her the scroll that I signed! Sensei Madame Tong reads the scroll and says, "Good."

She bows to Sensei Madame Tong again and says, "I have waited three months for a day of quiet."

If she thinks I am going to let her talk about me like that in front of everyone, she is even stupider than I thought! I skate up to her. "Do not think that they were bowing to you! Your stupid crippled arm almost lost us—Ai!" Doi Liang's hand shoots out at my head, grabs a fistful of hair, and squeezes! Aiyah, she has creased it! Three months of sleeping with a rolled cloth under my neck to allow the hair to grow back straight, and she has ruined it!

I start to do the double-bladed mantis chop move on Doi Liang's arm, but Sensei Madame Tong shoots me an iron stare. She is taking that Doi Liang's side! Piss me off to death!

Doi Liang releases my hair. It is still only at the level of my chin, so I cannot see how badly she injured it, but I toss it side to side and can feel from how it swings that that passage of hair is permanently creased and ruined.

"You stupid, ugly, low-grade—Ai!" Doi Liang's fist is suddenly in my hair again, squeezing and crushing! "Do not do that, you crazy dog fart, you are going to—Ai!" Her other fist shoots into my hair! Her crippled arm is still strong enough to bend my hair. "Let go, you evil, insane—Ai!" Both her fists tighten and twist in my hair!

Out of the border of my vision, I see the two Academy boys climb out of the water onto the boardwalk. Oh, no, I cannot let them see me like this!

"Not in front of boys! Let me go, you stupid, stupid—Ai!" Doi Liang's hands perform the ten-spoked churning maw move right in my hair!

The boys come and join everyone to watch.

I think I am going to faint.

When she finally releases my hair, my hands reach up, afraid to discover how terrible the injury is.

My hair is so creased and crooked and matted and frizzed that it feels like I am wearing a giant bird's nest on my head.

I think I am going to vomit.

Then the boys laugh and applaud.

Why me, why me, why always, always me! I want to die!

* * *

I receive my Certificate of Successful Penitence from Pearl Colony. The victory against the boys finished us in first place. But I feel no victory.

For that Doi Liang and I are not done.

We are not equal.

We are not even.

We are tied.

So now, you ask us all to write this stupid essay to our parents about what we have learned during our sentence here at Pearl Colony.

Well, I will tell you what I learned here.

Nothing.

Not one stupid, stinking thing.

You tell me that I am a wicked girl, but you just hate me because I am more determined to be myself than you were ever strong enough to be.

You cannot shame me. You cannot deny me. For I am Her Grace, Radiant Goddess Princess Suki. I will take the entrance examination for Pearl Opera Academy and I will prevail.

Next year at Pearl Opera Academy, I will have skated out of here and forgotten you, and you will still be nuns, ugly, talentless nuns.

Next year at Pearl Opera Academy, I will battle this evil girl again and I will prevail.

Next year at Pearl Opera Academy, I will win the lead role in the Drift Season Pageant and in Beautymarch, and I will be crowned Super Princess of Wu-Liu.

Next year at Pearl Opera Academy, I will make my stupid parents so sorry that they ever sent me away that they will beg me to forgive them, but I will not care because I will have already forgotten who they are, as everyone under Heaven will have forgotten them, as the nobodies that they are, while my name will live forever in glory.

Next year at Pearl Opera Academy, I will be a Legend. ○

Catalogue Note by the Artist

Beyond violet there's ultraviolet; beyond red, infrared.
My eyes are wide; flowers glow long past dusk
While in the dark of night lovers shine hotly.
Reality has other dimensions hidden orthogonally
(as it's called) away from the customary four.
So I began to paint in subyellow and suprablue,
Colors perpendicular to the visible spectrum.
At a further right angle is my famous J series
In jed, jellow, jreen, jlue, jndigo, and jiolet.
Visitors to this gallery may perceive blank canvases
Although they will feel disconcerted
Since I depict my dreams and nightmares
Which can be sensed unseen as absent presences.
Some very challenging paintings seem invisible;
Obviously those ones cost the ultramost.

—Ian Watson

DIGNITY

Jay O'Connell

Jay O'Connell's tells us his second story for *Asimov's* started as "flash fiction with an ax to grind, which we know is a Bad Thing, so I let it alone for a long time. Rewritten for my new workshop to allow the protagonist to actually protag, (what we in fiction call, a Good Thing) the ending surprised me—and made the story true." Jay now writes at Toscaninnis on Massachusetts Avenue, in Cambridge every day. His previously published work is available in *Asimov's* as well as the anthology *Not So Distant*—see his website *www.jayoconnell.com* for more information.

Melissa looked up into her father's unobscured eye.

"Can I keep her?"

Her father sighed, turning back to his wallscreen to pause a conference window. "There are laws, Melissa Elsbeth, against harboring the hopeless. What were you thinking of? How long has this been going on?"

"A few days," Melissa lied. She'd been bringing Lena food for over a week. Yani, Melissa's servant, had finally penetrated her lie, that Lena was the gardener's daughter, and told Melissa's father.

"Days?" She had his full attention now. Never a good thing.

"Melissa? Did you bring this girl into our house?"

"No." Melissa couldn't get Lena into the house proper without a biometric scan. "I brought food down to the garden shed. That's all!"

"Where has she been going to the bathroom?"

"There's a drain, in the middle of the floor."

Her father made a face, as if Lena had been going to the bathroom on the baby grand piano in the corner of his office. He squatted so his eyes were level with hers. His interface pivoted away. His coding eye was bloodshot, like a GPS roadmap choked with traffic.

"We can't keep a hopeless girl in the shed. Yani should have called security immediately. She will be docked a week's pay for her mistake. What do you think your punishment should be?"

Melissa held her expression neutral. This was a trap. If she chose too lenient a punishment, her father would exact something far worse, to teach her an extra lesson. Crying seemed to make the punishments worse. Crying was a sign of weakness.

Stalling, she examined the study's wallscreen, which glowed with an intricate tangle of code rendered to look like ore carts and factories and conveyor belts. Melissa could follow some of the logic already, the input streams and processing stations. There were icons that represented people, others that represented resources, drones

and bots. The goal, Dad said, was replacing the people with drones and bots with the fastest payoff. When Melissa had asked what happened to the people he replaced, her father laughed. Someone smart always figured out how to make a profit with the leftover people, he said. Eventually.

"You should decide," she said finally.

Her father nodded, a small smile playing at the corners of his mouth. He turned back to the wallscreen, sweeping away his work, invoking the estate security suite. A dozen window views bloomed, mostly inside the main house, but there were also shots of the grounds, the formal garden, the tennis court, the stables. In another pane, live feeds from the cams implanted in the household staff lit up another dozen windows. Servants washing, weeding, doing laundry.

"How did she get past the perimeter?"

Melissa shrugged. She hadn't asked. At first, she had thought the other girl really might be the daughter of another servant. Lena had been so eager to play with her, so eager to please. It had been fun, being with someone her own age. They'd actually played with the dolls and tea sets that her father had let her collect.

Melissa's father prowled the perimeter via a security drone, examining the 10-foot-high, electrified fence, checking it for weaknesses. There was a tree, an ancient thing, too close to the fence on the western edge of the estate. It had been pruned back before, so it didn't hang over into the estate, but had regrown . . . yes, a child could have climbed that tree, and jumped into the hedges that mostly hid the fence, which would have broken her fall.

He made a note for the gardener, to remove the tree immediately. And for security to sweep the surrounding forest for vagrants.

He flew the drone back to the garden shed, and growled on discovering that the shed's door wasn't powered. He couldn't open it. Circling the shed, he found a missing windowpane and flew inside to inspect the interior. And the girl.

A skinny child, with coffee-colored skin, dark eyes, and close cropped hair, in a blue everclean jumper, sat cross legged at a tea set, surrounded by Melissa's dolls. An antique porcelain Victorian, retrofitted with a cybernetic chasis, was pouring imaginary tea for a Native American and a fairy with rainbow hued holographic wings.

The girl whirled at the tinny buzz of the drone, her eyes going wide. The drone locked onto the girl's right hand holding the tea cup, reading the tattooed barcode.

Her father invoked a search of public records. Within seconds, Lena's profile filled a window.

"She's an orphan. Parents dead in one of the urban plagues. No holdings . . . disappeared from a medical research compound six weeks ago." He puffed out his cheeks. ". . . And she's unenhanced, of course. Junk genome. Public domain."

"She could serve," Melissa said quietly. "She could be my servant. I could take care of her with my allowance. She doesn't eat much."

Her father frowned.

"Yani was conditioned to serve. All of our servants are conditioned. Not a trivial expense. That's how we know they're safe." He shook his head. "We were talking about your punishment. Not about adopting a hopeless girl."

"I could pay for her conditioning."

Her father was scrolling through Lena's profile too fast for Melissa to follow. "She's not worth training."

Melissa fought back tears. This was the problem with her allowance, and if her older sister Christine was any indication, with her share of the family estate. It wasn't really hers. Any purchase larger than a piece of candy had to be thumbprinted by her mother or father, who had opinions as to what was a reasonable way to spend her money. She sniffed. She wouldn't cry. Crying meant the argument was over. It meant she'd lost.

"When you give someone something they haven't earned, you take away their dignity. The more you give them, the worse they get. You know that."

This was the kind of thing they talked about in Sunday school. Melissa hated Sunday school.

"I've decided on your punishment."

She followed her father into his study's bathroom, where he thumbed open the medicine cabinet and rummaged amidst the amber vials until he brought out a roll of foil wrapped candies.

"Give the hopeless girl one of these with her next meal."

"Her name is Lena,"" Melissa said.

He held out a silvery lozenge. "It will make *Lena* go to sleep. I'll call security, and they'll take her back where she belongs. Somewhere she can be of use. She won't be a stupid, dirty little girl growing into a stupid, dirty woman with nothing to offer."

He pressed the candy into her damp palm. She followed him back to his wallscreen.

"I understand this is hard, Melissa. You feel compassion for this person. That's forgivable. But you broke the rules, so you have to do this. You have to make this right."

He gestured at the screen, invoking stalled processes, resuming a conference. "If you take care of it, like a big girl, I'm prepared to let you design a puppy for your birthday. Any kind you want. If you can't act your age, then you'll get no birthday present or party this year. Am I making myself clear?"

Melissa recognized that tone of voice. The conversation was over. She held her anger carefully in check, eyes cast down. Her father's interface had swung back into place already. His lips moved as he subvocalized.

"Now run along."

Back in her room, Melissa sent Yani away, and then let herself cry. She lay on her bed, her face pressed into her pillow, hot tears flowing noiselessly, invisibly, into the fabric. Yani wasn't a bad governess. She picked out Melissa's clothes, dressed her, washed and braided her hair, but there was no love there. She spoke when spoken to, smiled coolly, and seemed always to be a half million miles away.

Melissa pored over the puppy builder on her slate. She would design the most expensive puppy ever built. She checked off everything, and where she couldn't check off two things at once, she went with the first choices, which were always the most expensive. Neural enhancement, security implants, remote control cortical implants, disease resistance and self-repair nano-bots designed for military and police service dogs.

The figure made no sense to her, the price, but it had quite a few zeros.

She found a Servant Bonding Agency, and clicked through the employment forms, rules, rates, and regulations. It made her head hurt, but she eventually arrived at a number for what conditioning Lena might cost.

About a quarter the cost of the maxed out puppy.

Smiling, Melissa went back to the terms and conditions clauses from the puppy mill. Her contract law classes in second grade came in handy, as she struggled with the language. Services that translated the legalese into plain English couldn't always be trusted, but they helped her home in on the problem passages, as she created her own custom contract proposal.

She worked on the problem long into the night.

Lena's father was clenching his teeth as he replayed the video, the muscles in his jaw bunching and unbunching. Melissa stood at his side and pretended not to notice.

On screen, Lena and Melissa were embracing.

"Why are you doing that?" her father asked.

"She likes to hug people. She says her parents used to hug her all the time."

"Did you like it?"

Melissa shrugged. "It's kind of nice. I mainly did it to be nice to her, though."

Her father grunted. "We don't hug the hopeless, Melissa. Ever. Do you understand?"

Melissa nodded.

The camera view didn't include Melissa's face, which was pressed to the side of Lena's head. The video's audio track burbled with unresolvable static. The security software couldn't pick any voices out of the wall of noise created by a lawnmower running outside the shed.

"Did you warn her, Melissa?"

Melissa shook her head. "No."

"Because she didn't eat the candy. She left it on the tray. She's disappeared."

"I guess she didn't like candy. I gave it to her though, like you asked."

Her father looked at her for a long time. Looked back at the video window, of his daughter and the dirty little hopeless girl frozen in an embrace. He nodded his head curtly.

"You did what I asked," he said.

Melissa suppressed a smile. She was glad that her security transponder lacked an audio and video feed. That kind of thing wasn't done in families. Nor were lie detecting MRIs used. This technology was only employed with servants.

It also had to do with dignity, she remembered from Sunday school.

Melissa waited until half an hour before a cocktail party to ask her mother to approve her change order for the puppy.

"What do you want to change?" Her mother frowned, glancing at the form. Her dresser was weaving faintly luminous green jewels into her towering hairdo, which made it hard for her to move her head. Her mother hated reading, and when she thought her daughter wasn't watching, mostly used her slate in text to speech mode.

"Just getting rid of things I didn't really need. I didn't want to be wasteful."

Her mother nodded and thumb-printed the change order. Melissa's puppy—she'd decided to name him Paris—lost his remote control and his neural and life extension genemods.

She waited until her father was standing in the entry hall with his footman. He was dressed in elegant black evening wear, dinner jacket and tie.

"Dad!" Melissa thrust the pad at her father. "My reward?"

Her father looked annoyed. "Not now."

"Please? I did what you asked."

Her father's face looked naked without the interface. He'd complained about his eyesight, but had put off the corrective surgery. Mother joked about Father's old man eyes. When he wasn't around.

Her father squinted at the dense, tiny type on the pocket slate.

Avoiding surgeries, her father had told Melissa, when she'd cried before getting her security implants, was a sign of weakness.

He thumbprinted the form.

Melissa watched the copter lift off, the wind blowing back her hair. She laughed.

The refund from the puppy order change would pay for Lena's conditioning. Her father had approved the second transaction. Her mother the first.

She didn't care what her punishment would be. She didn't care about her dolls. She didn't care about her toys. She didn't like parties.

Lena was better than any dog. So much better.

And she would be all Melissa's.

For life. ❍

THE FITTER

Timons Esaias

Timons Esaias is an Asimov's Readers Award winning poet and a satirist who lives in Pittsburgh and teaches at Seton Hill University in Greensburg, Pennsylvania—chiefly on the faculty of their MFA in Writing Popular Fiction. The author's poetry, both literary and speculative, has appeared in markets ranging from *Asimov's* to *5 AM* and *Elysian Fields Quarterly: The Literary Journal of Baseball.* His poetry chapbook, *The Influence of Pigeons on Architecture,* is available at Amazon and his short fiction publications include stories in *Interzone, Asimov's,* and *Future Games.* Timons' current project is *Warfare for Writers,* a manual for authors who forgot to major in military science or history. He admits to us that a French essay on semiotics was one of the seeds that grew into his latest short story.

"I don't really approve of people from other planets."

Miss Douglas believed quite strongly in being clear from the very outset of a job interview. The employment agency had proven quite lax, of late, in screening the applicants. The proof of this laxity squatted before her right now in all its alienness.

The applicant most resembled a seven-foot-tall sea anemone wearing bits and pieces of rococo knight's armor from the late Middle Ages, all greaves and layered breastplates and doodads sticking out everywhere. Swiss army knife armor, like they wore at court, long after the wheel-lock had made armor obsolescent in the field.

But not a full suit of it. Squishy parts peeked out in several inexplicable places.

Miss Douglas focused her attention on the resume. "I see that you have, in fact, no work experience whatsoever."

The alien began an utterance. This entailed several seconds of distant-sounding gurgling, ending in a sigh that one might describe as reluctantly sensuous . . . if one were so inclined. The last part of the sigh turned into the word "Yes."

"And what makes you think that you would fit in here at, hem, Randi's Bustique Boutique?"

Perhaps the creature from Thalia Majoris IV–B scanned the store to determine

what might fit in well there. The prominent display of sensible housecoats and thick flannel bathrobes did not fulfill the promise of the shop's name. The more uplifting foundational garments could only be observed here and there, in distant dark corners and from behind far more conservative selections. Patterned black lace hosiery fought a losing battle for space with opaque taupe types beloved of senior citizen churchgoers.

Randi's was a lingerie shop in the process of de-emphasizing its main product.

"Gurgle, gurgle, gurgle, sigh . . . The employment agent assured me that working here would be well within my range of capabilities, Miss Randi Douglas."

"The person named Randi is no longer associated with this establishment," Miss Loreena Douglas snapped, for the thousandth time in the last ten months. She'd have wiped her no-good niece's name off the store and business license already if it wouldn't have cost four hundred honest dollars to do it. "You will kindly address me as 'Miss Douglas' for the duration of this interview."

She attempted to glare at the Thaliamajoran, but was distracted by the wreath of small tentacles, slowly waving like tendrils of ivy in a summer breeze. And that distraction led to another. Women were gawking. Actually gawking through the front window. Some were inside, pretending to examine merchandise, while actively avoiding the attention of the two salesgirls. It was quite bad enough that she had had to bring them both in, but interviews did require her full attention.

Even if there was only the one applicant. Miss Douglas's reputation had spread far and wide in the job-seeking community.

New salesgirls didn't stay long at Randi's Bustique Boutique.

"Let me put it another way, uh, Mr., uh," her eyes scanned the printout held disdainfully in her unadorned, and unpampered fingers, "Throgmorton. What attracted you to lingerie, or was this the employment agency's suggestion?"

The Thaliamajoran did not explain, as it could have, that it had failed to find work of any other kind. Thaliamajorans had not brought brave new technologies with them from the stars. Their spacecraft, which resembled freshly pulled beets, were completely inadaptable to human use, and required frequent repair. Neither their diseases nor their medicine were terrestrial in nature or relevance. And they revealed no special talents other than, well, being alien.

Hollywood employed numbers of them, as did Madison Avenue. Thaliamajorans took direction well and did not inquire into a character's motivation or history. Those with less talent naturally gravitated to Vegas. As more arrived they found work on Broadway, and subsequently in regional theater.

Throgmorton came to Earth after the cusp of Thaliamajoran media interest. Audiences were going back to the fourteenth year of Britney Spears treason trial coverage. Science reporters, tired of discovering surprisingly uninteresting facts about the first extraterrestrials, had moved on to old standbys like global warming and the coming Ice Age.

"Gurgle, g–, g–, sigh . . . In considering the realms of possible employment I became aware that lingerie and the female form is a pervasive icon of your society. Lingerie appears repeatedly in motion pictures, television, most magazines, and almost all newspapers. It is a vital feature on the covers of your most popular paperback novels. Lingerie is clearly, along with automobiles and firearms, a cornerstone of your civilization. Yet when looking in the Yellow Pages one finds far fewer outlets for this product. This suggested to me that the lingerie industry was in the nature of a cartel, and therefore a desirable industry in which to seek a position."

Miss Douglas pursed her lips. This sounded to her as though the creature had some business judgment, but she had lost the thread while wondering exactly where the thing's voice came from, and how.

The pinging of the credit register reached her ear. And in the corner of her eye

there appeared a customer, a customer trying to get her attention. The kind of customer Miss Douglas most disliked to serve, being unconscionably fleshy. *Whatever had happened to discipline and self-control?* Miss Douglas frequently asked of an unrepentant world. *How can such women bear to present themselves to the public view?*

"Excuse me," said the impudent customer. "How would this look on me, do you think?"

Miss Douglas feigned unawareness of this interruption. Her interviewee, while also not turning toward the speaker, emitted, "G, g, g, s . . . Which of your many fine features do you wish to emphasize?"

The article dangling from the hanger in the woman's hand seemed designed to let any and all features speak for themselves, but she did have the ability to blush. Dimples suddenly punctured her face near the corners of her mouth. "Ooo–uh," she replied. Her eyes shone. Her feet subtly shifted into the first ballet position.

"G–s . . . It really could not be better suited, don't you agree, Miss Douglas?"

Before Miss Douglas could reply, the woman announced happily, "I'll take it." She fled toward the checkout counter.

"What is your address, Mr. Throgmorton?" Miss Douglas asked firmly.

"G–s . . . It's Throgmorton12@yabanci.com."

Though Miss Douglas did not hold with idle curiosity, she did not mind profiting from those who did. Aliens on the screen may have paled in popularity, but Thaliamajorans in person were apparently quite another thing for mall denizens. Miss Douglas let Minine ("It's like Maxine, only it's not.") and Alsatia deal with the customers. and against all precedent undertook the training of Throgmorton herself.

She did not feel it necessary to conduct this training in the privacy of her office. If one did not desire certain information to be overheard by the general public, a whisper could suitably convey it.

There was one awkward hurdle, however, and eventually that hurdle had to be faced. Directing Throgmorton to the back of the shop, she pointed out the curtained cubicles. "These, Mr. Throgmorton, are the fitting rooms. Customers are allowed to try on all our items with the exception of hosiery and briefs. You will keep careful track of those items going into the cubicles, making sure that they all come out again. Some people are not above theft, even of the most intimate apparel." She paused, so that an awareness of this unfortunate depravity might sink in to his consciousness.

The pause took on the air of a hesitation. "Mr. Throgmorton," she began, but did not continue.

She gathered herself, straightened her spine, and began again. "Mr. Throgmorton, there will be the occasional customer who will require assistance in the process of trying on a garment. Perhaps they will request your opinion of a garment's suitability. as we have already experienced, though they might wish to have the garment on in this case."

She waved a hand emptily for a moment, seeking the next phrase, "Or perhaps—very rarely—a customer will need you to actually take a hand, er, ah, to physically assist in the tightening of a strap or the hooking of a brassiere." She gave him a look of uncertainty. "You feel that you would be capable of this, Mr. Throgmorton?"

"G–s . . . Yes, of course, Miss Douglas."

And even as it replied, three voices chimed, "Could I have a little . . . ?"

Throgmorton's ability to extend its shepherd's crook-like extensions into two cubicles at once, fully assisting a pair of customers simultaneously, both shocked and gratified Miss Douglas. She sent Alsatia into the back to bring out more stock. The thought crossed her mind that a few days of brisk sales would go a long way toward balancing the books.

Her niece had been irresponsible, yet somehow business had been better in her time. Miss Douglas always felt an uneasy self-doubt when she thought about that. So she didn't.

Minine made the most of this unusual development at the store, spending hours scorching the infobahn with her observations on the new co-worker. "Honey, with those hook things of his he looks like a threesome of bishops, and don't tell me that some of those bishops aren't just like that. I could tell you some things, believe me."

And, "Honey, the guy looks like an octopus jammed upside down into a rusted out trash can if you ask me. . . . What do you mean he ain't a guy? Don't you believe what some TV scientist says about sex. Those types don't get out enough. And when they do, well, I could tell you some stories. . . . Trust me, doll, with this many women hanging around it's gotta be a guy alien. They can smell it. . . ."

And, "Honey, I'd quit the place if I didn't need a discount on my unmentionables. Why men take them like trophies is beyond me. You don't see me papering the wall with boxer shorts. And the cute stuff ain't cheap, neither. . . . Gifts? Ain't hardly a man out there who'll even pay for dinner anymore, thank you Ms. Gloria Steinbomb. Honey, let me tell you, what you get from men these days—half the time it's incurable . . ."

And, "It's not fair is what it is. He rakes in all the commissions, except for the timid ones. If I didn't work on their guilt I'd be losin' money on this job. While they're peekin' at Throgfart I'm movin' them into the pricey stuff. . . . Well, the guy gives Als'n me a third of his for ringing them up, cause it's 'could he help me' this and 'could he fit me' that all day. . . . So, yeah, I'm makin' more'n I did but Miss Stick has us on full-time and I get home an' my feet are *killing* me. Honey, it's cuttin' into my social life!"

The popularity of her new salesalien forced Miss Douglas to be severe with him on numerous occasions. First, there was the matter of product selection.

"Mr. Throgmorton, do I detect a reluctance on your part to sell the more undisclositive of our merchandise? It seems to me that you unduly stress the transparent and the minuscule, which makes up but a small fraction of our many lines."

"G–s . . . I had understood from the remarks of Minine and Alsatia that the less there is of a garment, the more the profit. Does this view need revision?"

"Elegance, Mr. Throgmorton," said Miss Douglas regally, "elegance is also worth an extra percentage. Elegance has its own sensuality. It has its own mystique."

"G–s . . . Elegance?" it asked, suggesting that this human virtue had yet to make its presence felt in the depths of space.

"Alsatia!" barked Miss Douglas, summoning the tattooed, bald young lady in an outfit of tight-fitting blue leather on one side and loosely draped jersey on the other. Her eyes peered through gold rings attached just below her vermilion-tinted eyebrows. A delicate fingerless glove of chain mail accented her left hand.

"Alsatia, Mr. Throgmorton here does not understand the term elegance. Before you leave tonight, could you acquaint him with those items in our collection to which that quality obtains?"

Throgmorton's question did make Miss Douglas pull up the spreadsheets.

A review of the wholesale prices suggested, indeed, that demure items did not carry their full weight in the profit area. However distasteful, a reconsideration of stock selections might be necessary. The road to hell, she suspected, was paved with healthy balance sheets.

Alsatia dutifully revealed the secrets of elegance as it related to Randi's Bustique Boutique. The three quite separate forms of elegance were the color black, if it sug-

gested revelation while actually concealing; lace; and things that suggested an origin in the Victorian era, though not necessarily resembling the actual historical items in any conceivable way. She further attempted to explain that certain shades of the color beige were considered elegance itself, but strayed from that subject into the history of the eponymous Randi.

"She was Miss Douglas's brother's girl. Her folks broke up and her dad died and Miss Douglas loaned her the money to buy this place. About a year ago Randi met this guy, his name was real geeky, like Nathanial or Thurston or something? But he rode a motorcycle and sold drugs. One day she just up and ran off into the sunset with him, so Miss Douglas had to take over the store. She wants to unload it, but she hasn't had a decent offer yet, I guess."

"G–s . . . The shop seems very busy. Is there some problem with the location?"

"No offense," Alsatia's eyes glittered behind the gold, "but we're only busy because *you're* here. You're quite the attraction."

"G–s . . . So novelty alone is my function? I have been striving to provide attentive and courteous service."

"Novelty is what this business is all about," Alsatia began, when an explosion of bubble-gum from the end of the aisle interrupted her.

"Honey," snapped Minine's authoritative voice, "the *illusion* of novelty is what this business is all about. Folks want novelty, they're gonna have to work a lot harder than this. Trust me."

President Sean Penn's ex-wife, still semi-nude despite her age, dropped in without an appointment. She apologized for this oversight, shook Miss Douglas's hand, and proceeded to monopolize Throgmorton for the next two hours.

She spent a small fortune on things she'd never really looked at. Her eyes, instead, had seen only Throgmorton. Had lingered on its every tendril. Had adored each knob and protrusion of its every semi-organic crustal surfaces. She, who moved in the same social circles as some of the big-name theatrical Thaliamajorans, had cooed and dimpled under the careful attentions of Throgmorton's crooks. She had presumed to draw, with dark purple lipstick, a smiley face on the fitter's exterior.

Miss Douglas had to be even firmer with the alien after that.

"Perhaps it is not clear to you, Mr. Throgmorton, that clients such as we are now attracting will not be content to share your services with mere suburban housewives. They will expect to be treated exclusively. They will have to have a separate area of the shop to themselves, and they will require appointments. You will simply have to make three evenings a week available, and come in two hours earlier on Tuesdays and Thursdays." She paused for his response.

"G–s . . . Yes, Miss Douglas."

"Very well. And now I need some help quadrupling the price of every item in this store. These people expect coddling, Mr. Throgmorton, and they expect to be fleeced. It's their little way of admitting that great wealth has nothing to do with great merit."

"G–s . . . Won't Alsatia and Minine be inconvenienced by this arrangement?"

This had not crossed Miss Douglas's mind. She had martyred herself to keep up with the extra demands the business had required these last few weeks, and expected nothing less of them.

"They may resent the size of the commissions that this sort of customer *will* produce. You might want to share some of yours with them, though I won't insist."

"G–s . . . Would 50 percent be enough, do you think?"

"Let me tell you, honey, she's ordering some fancy stuff now." Minine had this guy

figured for at least another two drinks. Maybe he'd spring for dinner. "Why she's got stuff coming from Chez Nous, and Katmandu, and Timbuktu. Expensive stuff wholesale. I'm afraid to steal any of it. But these folks is paying big money for it. Big money."

The attentive gentleman signaled casually for another round. "What's the alien get out of this? He get a cut of the business, or what?"

"Not from Miss Kiss My Icicles he ain't. Three percent, just like we always got. Mind you," she added, in self-interest, "that's turned into a healthy sum, lately. The money part's fine, but I don't get much dancing time with the hours we got. A girl's gotta dance, if you know what I mean?"

"In local business news, Waldo Ace, millionaire entrepreneur and owner of Rodeo Drive's most exclusive mall, has been frustrated in his attempts to lure a Thaliamajoran salesentity away from a suburban L.A. panty boutique. The alien has reportedly turned down a huge salary offer, citing 'loyalty to his employer' as its reason. The alien supposedly developed this quaint notion as a result of watching an all-night retrospective of old Mafia movies."

The customer, and her entourage, were completely wrapped up in emergency video calls about a scandal involving two of her Cabinet Ministers and some kind of vegetable.

"G–s . . . As we have a moment, Alsatia, may I admit that I am still quite puzzled by the relation of 'elegance' and the shade of beige called 'umberine.' Had you not deftly snatched that body corset from me I would have presented it to Her Excellency."

Alsatia raised the veil that was clipped to her eyebrow rings. "I'm not sure I can explain. It's not just because you're not human. I don't think an Eskimo would understand unless they'd grown up with it."

"G–s . . . How discouraging. I keep trying to grasp the logic of all this. . . ."

"Ah!" the girl interrupted. "It isn't really logical. Have you read about semiotics? The study of signs and meaning?"

"G–s . . . Could this be helpful?"

"There's this book you should read, *The Fashion System*, by this French intellectual. It'll give you the idea . . . oops, she's off the net."

"G–s . . . What would Your Excellency wish to try next?"

Minine smiled smugly. Right first time. There was Randi Douglas on the friends list of the *Bikerbroad.com* HotTimer Facebook page.

A few keystrokes to the wise, in Minine's opinion, was the least she could do. The very least.

"G–s . . . The concepts of Fashion, then, are rather arbitrarily determined by the various fashion design houses and fashion critics?"

Alsatia nodded, which set the bottle-caps of her cape rattling. "Though tradition and culture do define many of the symbols."

"G–s . . . And so to understand 'elegance' or 'youngness' or 'sophistication' one need only read fashion magemails and advertisements and make note of the assertions that they make. Even if they are without logic?"

"Exactly. This year palm-print silks are considered Second Empire, though I doubt the Second Empire ever saw such a thing. Yet *Infanta* says it is, so it is."

"G–s . . . But next year?

"Is next year."

"Why, if it isn't Miss Randi," exclaimed Minine, rushing to open the front door.

"Why, Aunt Looey! You won't believe where I've been!"

Miss Douglas met her niece's unannounced return without surprise and without warmth. "And why, young lady, would I care to believe it?"

"Surely you're glad to see me, Aunt?" said Randi, hobbling across the carpet in heels, the chopper-straddle not yet out of her gait. "I'd have emailed, but can you believe it, there are still places . . ."

"I suppose," the acidic aunt practically hissed, "that you've come back to take over the business." It was not a question.

Minine drifted back toward the Maternity Specials.

"Well of course. And as soon as we get settled, Halstead and I, we'll catch up on those payments. . . ."

"I suppose," the sulfuric aunt steamed, "that you are unable to pay the balance of the note upon which you are in default."

Minine slid somewhat behind the Maternity Specials, edging toward the Classic Foundations.

Randi pouted in frustration. "No, but you won't have to look after this place anymore and we intend to make it up to you for taking over while we . . ."

"I suppose," the volcanic aunt oozed, "you remember my lawyer who wrote you the checks. I had already supposed that you would have become aware of media reports about our success here; reports which, I might add, *are greatly exaggerated,"* she said, allowing her eyes to flicker to the employees for the first time. "He has some documents for you to sign, so as to avoid the disgrace of arrest. Perhaps you should see him this morning, while you're still in town."

The spurned niece, bursting into uncharacteristic tears, turned her back and stormed out. Her shoes flew off in careless arcs, and the last that was seen of her was her calves jiggling down the sidewalk, the rest of her obscured by the banner declaring GRAND REOPENING OF LA BUSTIQUE.

Minine had already discovered something urgent in Completely Unmentionables.

The following evening Alsatia stayed late to help Throgmorton unpack the new shipments. Miss Douglas had chided the Thaliamajoran for losing touch with the basics of merchandising, now that heads of state were regular customers.

"G–s . . . I believe that I am now beginning to grasp Fashion-as-signified by the emblems and signifiers of women's undergarments," it remarked gratefully to Alsatia. "Alas, now I am puzzled by something else. Minine strives for a look that says . . ."

"Tawdry."

"G–s . . . Yes, and 'sleazy,' and she achieves these with great consistency. But in your case I don't find anything in the Women's magemails that Miss Douglas has around the shop, or in the couturier vids. Take this item you are wearing now, the ensemble of velveteen, rubber-tubing, and . . . are these not the covers of old hard-back books?"

"Yeah. I found a bunch of them at the WellnessWill. Kinda tough to stitch together with the fabric."

"G–s . . . And the steel-toed shower slippers. The theme escapes me."

Alsatia reddened slightly. "I try to change my look faster than anybody can define it. My motto's 'one step ahead of meaning.'"

"G–s . . . So all this is original? Does that not make you a designer?" asked the alien, gesturing broadly with seven packages and a box cutter.

"I guess. For a clientele of one."

Received: from megafunds.com (GTPS V183.2-9 #21152)
id <(not for public release) via POSTERESTANTE@megafunds.com
To: Throgmorton [Throgmorton12@yabanci.com]

Date: Tue, 14 Jul 2029 15:03:52 -0500 (EST)
From: Felicity Finalli, President & CEO
Tiffany, Harrod & Bonwit-Pierce, Fenner et al.
Subject: Acceptable Offer?
Sir,

We at Tiffany, Harrod & more are impressed with your refusal to desert the establishment and the employer who gave you your start in the luxury lingerie business. Frequently do we regret the days when the legality of personal firearms allowed a company to maintain such devotion.

It would be insensitive of us to push the matter further. Still, is there not some way that your goals (of solid Thaliamajoran origin I am sure) and our goal of unchallenged market dominance could all be met?

Please feel free to make any suggestions via encrypted reply.

"Honey, I think it's time we started thinking about selling our stories to the Rather show. They've been after me for a month." Minine and Alsatia could tell something was up. Miss Douglas's lawyer and some business types were huddling in her office.

"How can you even consider that scuzzvid?"

"They pay top dollar, young lady. Top dollar. And they might cast me in the re-enactments, or use one of those computer thingies that makes it look like me. Virtuous reality. Then you get residuals."

Alsatia bit her choke-chain.

"You just watch," Minine advised, straining to read some more specific sign or portent through the firmly closed door, "we'll be out of a job by lunch."

"G–s . . . er, Miss Douglas? I'd like you to have this, before you go back to Offshore California." The alien proffered a small gift-wrapped box. "It's a small token from my home planet."

"Really, Mr. Throgmorton, I . . ." she took the box from him. "May I open it?"

Inside the box, cradled in crushed velvet, was a small clear tube. Taking the tube out, she could see something inside that resembled a dust-bunny.

"Could you explain this to me, Mr. Throgmorton?" she asked, uncertainly.

"G–s . . . Alas," Throgmorton's tendrils waved oddly, "it is impossible to convey the real significance of cultural icons to others, don't you find?"

But then the paparazzi spilled into the reception hall of the Park Plaza's original Manhattan hotel. The announcement of Tiffany, Harrod and more's new Throgmorton label of sensualwear, with designs by the shockingly up-to-the-instant Alsatia—"previously designer to an extremely select clientele"—had captured the attention of the entire world of fashion newsploitation. Eyebrows had been raised at rumors of an extraordinary buyout of Throgmorton's employer, and the catapulting of career salesgirl Minine Knudsen to chief buyer for the vid-order Naughties of Newark chain.

It was the classic story of "out-of-towner makes good in the big city, and remembers who got him there." It sold ad-spots. It warmed hearts.

There just had to be a scandal in it somewhere!

Though rich beyond her bridge club's wildest dreams, Miss Douglas still had them over to her sensible Bel Aire mansion once a month. When her eyes would drift to the little ivory casket that held, as she had told them, a small but precious gift from an old acquaintance, they would try to get her to talk about her famous Thaliamajoran friend. "What brought that up again?" she would always complain. "You know I don't really approve of people from other planets." ❍

VOX EX MACHINA

William Preston

Credit for this tale's first breath goes to the author's eldest daughter, who informed him of the news that started his storytelling engine. As he says to students in his high school literature and film classes, though, "Inspired by a true story" means "We made up 99 percent of this." Bill is also currently making up the final two stories in his Old Man sequence.

The head in the zippered bag wasn't an actual human head. Having climbed onto the seat arm so she could reach into the first overhead compartment, Karen tilted the sack toward her. Why, she wondered, shape a face yet not make it more attractive? Lips and puffy cheeks too red, as if the man had come back chapped from an Arctic expedition; blue eyes too large, even under half-lowered lids, like the cows' eyes she had dissected in biology class; the nose and chin both outthrust unreasonably far; and sparse, erratic hair: combined, these features produced in her a surge of pity for a face that had never drawn breath.

In the rear of the plane, Brenda, the crew chief, bent to retrieve trash, her hips touching the seats on either side.

Karen zipped the sack shut, then slid the sack into the tote bag slung over her arm. Maneuvered beneath a sweater, it joined her purse and the current airline magazine. She climbed down from the seat arm. Some airlines still had height requirements, but being short hadn't kept her from landing this job two years back.

Brenda waved. Three weeks ago, when Karen's husband, Chris, had run off, probably with a woman he met through an online game, Karen had confided her woes to the older woman. Chris's handwritten note had said only that he would send divorce paperwork eventually.

Brenda had a live-in boyfriend and a child from a prior relationship. "I'd kill the man who did that to me," she had said, convincing Karen with a steady glare. "And I'd make it slow. One body part at a time. And you *know* where I'd start."

Though the women had shared this flight route several times since then, that had been their last substantive conversation on the matter.

In her standard goodbye gesture, Karen flapped her hand like a clam's mouth.

The copilot stood in the cabin door watching the captain's back. He turned as Karen approached. "All good?"

"All good," she said, loud enough to make the captain turn.

She resisted the impulse to hurry, steadily leading her wheeled suitcase up the ramp, her other hand on the shoulder strap of the tote. She imagined the face with-

in, then tried to not see it. Once away from the gate, she studied every aspect of the concourse—the bookstore, the restaurants, the children nearly her height—as if everything except for her were worth someone's interest.

In the parking garage, she hefted her suitcase into the hatchback's trunk, but the other bag she kept up front, snugging it against the passenger's seat back. She'd bought this car when she started college, before she'd known Chris. He'd gone off in their beige sedan, which smelled of cigarettes from a previous owner.

It must have rained at some point. The highway shone violet in the twilight. On her twenty-minute drive home, she sang songs she hadn't thought of since high school, her reed-thin voice sounding loud in the car. She pulled up to her house's kitchen entrance, under the carport roof.

The sack felt altered, heavier, more alive and alert, tensed like a bomb, so once in the house, urgency led her to deposit it on the closet floor of her former bedroom, where she hadn't slept since Chris's departure. Suddenly mired in exhaustion, she staggered to the spare room and shoved the blankets aside, her black shoes still on her feet and her legs dangling from the bed when she fell asleep.

When she opened her eyes next, the glowing curtains told her it was morning, but she couldn't think what that meant. She knocked off her shoes, then pulled the covers over her; she breathed in her own hot air and felt she was a child again. Shortly, she came fully awake and, realizing she hadn't yet been called for another flight, dug down deeper under the blankets, hunting more sleep.

When at last Karen uncovered her head, in the late morning, she lay still and wondered what she had done and why she had done it. She saw again Brenda waving from the rear of the plane. This time, Brenda pointed one well-manicured purple nail in the direction of her tote bag. "What'd you do?" Brenda asked this time. "What you got in there?"

To avoid inspecting the sack was to sequester her actions in an unreachable, imaginary realm—in a past that might have no connection to the present. She made the bed, opened the living room curtains, started coffee, and showered. The head's presence dragged at her like a phone distantly ringing, but she let it ring. Uninspected, it might not exist.

Eventually, having breakfasted and run out of tasks, she wandered into the other bedroom without plan. She pressed her top lip between her tongue and her teeth. What was she frightened of? She opened the closet door, but only extracted her purse and the airline magazine from her bag before making a disapproving face at the other shape within and quitting the room.

Afternoon television no longer delivered the expected pleasures of mild surprises and comforts. Nevertheless, she turned it on just in case, flipping between a local all-news station and repeats of crime dramas. Throughout, she stood. Then restlessness drove her to fill the sink with sudsy water for the few soiled dishes and the coffee pot.

She shut off the sink faucet and listened. The doorbell rang. Now they would arrest her. Unable to face the door, she blinked slowly and repeatedly into the suds. A bird's whistle pierced the window over the sink, and she thought how, in prison, there might be a single window through which came light and air and the sound of birds. She counted backwards from ten, but when she reached zero, she'd forgotten her purpose and began counting forward. Around eight, the bell double-dinged again. She groaned, giving in.

Through the frosted glass in the door's upper half, she saw a familiar head. Jonah, a friend of her husband's since community college, had been checking in on her every few days. Given her unpredictable schedule, he stopped by often when she wasn't

there, then left messages on her answering machine. He worked from home, doing something mysterious with computers.

He'd stepped off the brief porch by the time she opened the door. Unlike her husband, he was lanky; his full beard was thin, with an unaccountable, permanent gap on the left side. "Hey, there you are!" he said.

She threw up one arm like a performer receiving accolades. "Still here. Or . . . *back*."

Jonah and Chris had been part of the same online gaming communities, and though Jonah's place had a bigger screen and better speakers, he had sometimes visited to play on Chris's system. Karen didn't miss the system or the screen he'd kept in the second bedroom, though she'd played sometimes; she also didn't much miss the computer he'd taken, since she blamed it for likely connecting Chris with some other woman.

"Busy?"

"Just doing dishes."

"That's cool," he said, nodding to himself, and she wondered if she could have said something that would have resulted in a different response. "Don't let me interrupt."

She wondered whether she was being rude, but she didn't want a visitor, and she knew from experience that simply sitting to talk with Jonah made him incessantly rub his thighs and look anxiously around, so she returned to the kitchen and pushed up her sweater's sleeves. He pulled out a chair behind her at the circular table.

"I heard from him the other day." Without purpose, but as if pushing aside crumbs, he swept his arm across the table.

"Christopher?"

"He's in Idaho. Wait." One finger hovered over the table, then touched its tip down. "Yeah. Idaho."

"I don't need to know."

He compressed his lips to suffice for a nod, but she didn't see this. He gestured toward the living room. "You still don't have a computer?"

"I don't need it. If they take me off reserve, I could start picking flights online, but they haven't done that. So I don't need it." Karen didn't own a cell phone, not wanting to be constantly checking it, worrying whether it were on or off; she relied instead on the dependable land line and answering machine. She did have an e-mail account that, by now, had likely accumulated piles of spam. She had rarely used the account in any case, disliking how a casual conversation took on permanence in type.

She realized she had taken a plate from the drain and was rewashing it.

"That's cool," said Jonah. "I think about people who go off the grid. No electronics." He vaguely waved his hands before him, fingers spread, as though turning machines into mist. "Obviously, I need computers for work. To program. But some day. Home could be sort of Zen. Right?"

Then she remembered what she couldn't believe she'd forgotten.

"Would you," she said, turning as she thought how to phrase it, "would you look at something electronic for me?"

Jonah opened his arms wide. "Yeah! Sure! What you got?"

She dried her hands. "I have to show you."

Before opening the closet door, she hesitated. "Okay," she said. She knelt to lift it from her bag, then set the sack on the bed, unzipped it, and stepped back.

"Whoa. What the hell?"

"It's not real."

"No, I can tell it's, like, a special effects head. But, uh . . ." He tipped his own head to the side in consideration.

Since he hadn't moved to do so, she took it out. For the first time, she saw the open

area in the back, with one wire visible and other workings within. The neck, too, was open, revealing the ends of metal rods of varying width. She passed it to Jonah.

"Check. It. Out," he said, raising and lowering the object with each word as if judging its weight. "Where'd you get this?"

"I found it on a plane. In the, um," she raised her arm, "overhead compartment."

"Wow. What, they let you take stuff you find?"

"No."

She looked at the floor while he looked at her. She had absolutely nothing to add.

"The face is good," said Jonah at last, "but they didn't give the dude much hair. No one's come looking for it?"

"I don't know. Not as far as I know."

"Does this guy look *familiar* to you?" Jonah held the face level with his own. "I wonder what it does." Gingerly, like someone probing a wound, he poked into the opening. "Maybe there's an 'on' switch I'm not seeing."

It occurred to her—probably because she was with a man in this room she had shared with her husband—that Jonah might ask her out. She felt such an action might come at any moment. In the past two years, she'd rebuffed or ignored attention given her by pilots in the lounge or on the way to an overnight hotel.

Had she ever heard about Jonah having a girlfriend?

He said, "I think this little lever . . ." He checked the face, frowned, looked at the back of the head again, twisted his mouth in annoyance, examined the face once more, and said, "I don't know," then dropped it on the bed. "Whoa."

The eyes zigged about and the lids lowered and lifted once. A faint whirring sounded, mostly from the open space of the neck, where the base of two slender cylinders rolled back and forth, so the head rocked slightly.

The lips parted, and a deep voice from within said, "Hello."

"Whoa," said Jonah, and the head shuddered again and rolled onto one ear. One of the wires came free of the battery. "Whoa," Jonah said again. "I think it's trying to turn to look at whoever's speaking. You didn't see the rest of the body lying around, did you?"

The head said, "I'm afraid I can't help with that." The mouth opened and closed with little subtlety of movement.

"Oh, Jesus," said Karen. "It sees us?"

The head shuddered and rocked, and the eyes drifted. Karen backed away, but Jonah leaned over it, hands splayed on either side, and the eyes steadied.

"Hey, there," said Jonah.

"It's nice to meet you," said the head.

Jonah asked, "Who are you?"

"My name is Richard. What's your name?"

Karen tapped Jonah's arm. "We shouldn't tell it anything."

Jonah nodded.

"Who made you?" he asked.

"Craig and Terry made me."

"Who are Craig and Terry?"

"Craig and Terry are two men with a wonderful idea. Don't you think it's a wonderful idea?"

"Sure," said Jonah, but he looked at Karen and shrugged.

"I don't like that it sees us," said Karen, and she left the room without checking that Jonah was following. She stood utterly still in the living room, barely breathing till she heard Jonah emerge.

"Um," he said, coming around where she could see him. "There's a port for plugging it in. I've got a cord in the car, so why don't I get that."

She idled about the living room until he returned, holding a cable aloft in a victorious gesture. She let him go back in the bedroom alone.

"I left it switched on," he said when he emerged, "but the motor or whatever or fan stopped. I don't have any way of knowing how long the battery runs." He looked back toward the bedroom. "I don't think it turns on and speaks unless you say something or like give it a command."

"What kind of command?"

He gave a lost look.

She chewed her lips. "That was strange."

"Yeah. Weird." He tried to stuff his hands in his pockets, but his jeans were too tight to allow more than his fingertips, so his shoulders stayed up by his ears in a fixed shrug. In trying to relax, he appeared even less comfortable.

"Thanks for doing that."

"You're going to keep it there? Keep it *here?*"

"I don't know what I'm going to do." She cast her gaze fumblingly around the living room as if looking for a task. What might come next in the fading day was a mystery. Weariness gripped her limbs.

"I'm probably going to bed."

"Well, let me know if, whatever." At the door, he said, "And if you change your mind about a computer, you know."

She watched him go down the single front step and flapped her hand at him when he turned and waved.

She bolted the door, lay down on the sofa with her arm under her head, and fell asleep.

The phone startled her. She'd been dreaming of an airplane flight in which the cabin was missing. She hadn't seemed to be in any danger as she'd stood in the aisle looking at the clouds ahead of the plane.

"Yes?"

A woman said, "Karen Hughes? We have one for you in the morning. Five-thirty."

Before she left, as she put in her earrings, she stopped to consider the head. Jonah had propped it against the headboard between two pillows.

"Do you only talk if I talk first?"

The next sound might have been air or a spinning mechanism. She positioned herself at the end of the bed.

The mouth opened. "Hello." It sounded a bit like a question.

"Were you asleep?" she asked.

"I don't sleep."

"So I guess you don't have dreams."

"Dreams can reveal so much. They are often a source of inspiration."

"I mean machines don't dream."

"Humans are machines that dream."

She squinted, perturbed. "Humans aren't machines. Humans are alive and machines are machines."

"The Universe is a possibly infinite mechanism that is full of life yet not alive."

She tapped her earrings. "I have to go," she said. No response came. Perhaps she had spoken too softly.

Two hours later, she was at the airport, sore-eyed and sucking a mint, her suitcase rolling smoothly behind her, packed for two nights. The first plane, too, rolled smoothly, one of the silkiest takeoffs she could recall. A few times, she caught herself glancing at the forward right overhead compartment, as if another strange treasure

might be found there. She overnighted in a city she'd rarely come to, one she intended to explore, but when she reached the hotel and pressed the button on the elevator, she found that she lacked all energy. She flattened one of the airline's magazines on a small table and flipped through it backwards, stopping after each spread to nudge the television through a few stations. One article concerned the invention of tiny robots, nanites, whose presence would, someday, enable surgeons to repair the human body at a nearly microscopic level. She looked up from reading to contemplate the strange notion that the robotic head was from the future or had been left by aliens for her to find. More mysterious was why no one had asked the crew of that flight about the object. It was as if it hadn't happened.

She fell asleep to a boxing match between relatively small, heavily tattooed Hispanic men. Early the next morning, she put on one of the television shows that combine news with personal stories and endless good humor. She tried to imagine being one of the showrunners—not a guest, for what would she talk about?—but knew she couldn't keep up with the emotional shifts. Though she sometimes believed herself naturally buoyant, a sad story had the potential to derail her disposition for entire days. One tale of a suffering child or abandoned animal and she'd have to leave the studio and sit outside for a while, breathing the cold and filthy city air until the sky brightened enough to calm her.

"Here's a strange one," said the female host, leaning forward as if to better see the teleprompter text. "Inventors Craig Moulton and Terry Waterman report that they've lost their android's head. The head is part of a life-sized android designed to resemble author—"

The face appeared, and Karen flung herself face downward on the bed, burrowing into the superabundance of overstuffed pillows. Her breathing, once she became conscious of it, frightened her with its harshness, and she shut her mouth, but hummed a sustained note to keep from hearing anything. When she'd judged that enough time had gone by, she emerged. The hosts had moved on to a story about dogs. She swept her hand about till she discovered the remote among the sheets, and she shut off the set.

"Oh boy," she said, then closed her mouth firmly, feeling she'd been heard and, thereby, implicated.

That night, in another city, she tuned the television to a movie station and fell asleep before the private detective unlocked his lover's secret.

The first flight boarded at dawn. Passengers on one side of the plane lowered their shades against the sun as they moved along the tarmac. Once they'd lifted off, the plane turned, and passengers on the other side of the plane lowered their shades. Karen pushed the drink cart up the aisle, the plane trembling beneath her shoes. A persistent creak from a midplane baggage compartment drew looks from several passengers the way a loose window would on a windy night. She thought if she opened it, the head would have returned, following her, or coming back to the scene of its theft, though it wasn't the same plane or the same route.

She held out squat plastic cups of liquid, managing to absorb the shuddering in her legs, the turbulence generated by the clouds through which they passed, and distribute it through her knees and hips so that her hand showed steady.

Two flights later, she arrived home as the sun was declining. It was July, but a distressingly cool breeze blew from the west, where her street dog-legged away. Fall would mean that the season had escaped her. She had wanted to enjoy the summer, not sleep and work her way through it.

In the living room, the answering machine flashed. Jonah had left the message hours ago: "I know whose head it is," he said. "Call me. Please."

Once she had unpacked and filled a glass with tap water, she entered her former bedroom, leaving the light off. She eased each bare foot onto the carpet. Not a sound came from the head, but she didn't come fully round to face it before exiting.

Jonah's number was pinned with several others to a small corkboard above the telephone table in the living room.

"I saw it on TV too," she told him.

"TV? The story's online. It's everywhere."

"I didn't really listen," she said, so he told her what there was to tell. The robot was meant to resemble a famous science fiction writer who had died a decade ago. Jonah had read some of his books. Several had been turned into movies. There'd been an entire body attached to the head, though that hadn't come on the plane—only the head, and one of the creators had somehow lost track of it.

"It's pretty amazing. I saw a clip of it being interviewed. The body didn't move though."

Jonah wanted to know what she planned to do.

"I'm not sure how to give it back now." She thought of the cameras along the ceilings of the airport.

"Oh yeah. That's a problem. Sure."

She did not object to Jonah's promise to keep checking in. At least there was some conceivable purpose, something on which he might usefully comment.

She let the phone rest in its cradle only momentarily before fetching it up again. She owed her sister, Susannah, a call. Six months ago, she'd had a baby, her second child; Karen had visited a few weeks after the birth, when she could arrange a break. Though not much larger than Karen, her sister had produced a child that seemed too large by half to have come from her body.

There seemed to be some difficulty on Susannah's end, her sister's voice distant, then addressed to someone else.

"I can call back," said Karen.

"It's fine. I'm breastfeeding. Everything's in its place. Keep talking."

But Karen had nothing of consequence to say. She reiterated the basics of her days. In the silence afterwards, she realized she should have been asking her sister about the baby.

"You know," said the other voice, moving too close to the mouthpiece, so close Karen could hear her sister's breath pass on its way in and out, "you sound like you're just going through the motions."

Karen wasn't sure how to object. "What should I do differently?"

"I can't tell you. My God," she said, "this kid's draining my life." Then she giggled.

"Do you ever wonder," Karen asked, "how you got to have a life like yours?"

"As opposed to yours?"

Perhaps she had meant that, but it was a terrible question.

"Choices, Karen."

She held the phone away from her head as her sister continued, then said, when there was a break in the sound, that she had to go.

After hanging up, Karen remembered that Susannah's first child hadn't been planned.

All the rest of the day, Karen couldn't stop noticing her hands. It was the phrase "going through the motions" which had done it, made her self-conscious so they felt like small but unwieldy weights, the minor components of which appeared to move without her willing them. She watched how her hands broke and scrambled the eggs and how they held the furniture polish and worn-to-a-shine cloth. Each gesture seemed to take longer than it should have, so, eyes squinted narrow so much they

ached, she pushed herself to work faster, which didn't seem to happen. "Hurry," she said aloud. "Hurry up."

The next day was her day off, so no calls would be coming. She spoke to herself, but quietly, so as not to wake the head.

She dreamed that night of walking through the airport, whiter and brighter than she remembered it. No one was around, though she felt there must be some explanation for that. Everyone was gathered elsewhere, watching something important. She carried, awkwardly, a wrapped blanket that contained the head. It weighed considerably more than it ought to have. Her hands kept tugging the swaddled strips closed, and she imagined that, though surely it was still a head, it now looked like an enormous eyeball that wanted very much to see where she was taking it. She came to an escalator, put out both hands to steady herself, and watched her package bounce down the moving metal stairs. Many people now appeared on the concourse below, which should have surprised her, but didn't. The swaddled head arrived in the midst of them, wrappings gone; then the mouth opened and it shouted. "Hey! Look here! Look what happened to me!" When she tried to walk backwards, her heel struck the preceding step, and she awoke.

She always made too much coffee, drinking only one small cup before doing anything else, then letting the rest sit in the pot. In the shower, she opened her mouth to the shower's spray to rinse out some of the coffee's bitterness. Then she had another small cup with her cereal. The coffee maker's heating element had automatically shut off while she was in the shower, so she had to microwave the tiny white cup. After a few seconds had snapped past on the digital readout, she felt herself weaken and she clutched at the counter. She rubbed her face to stop the tears, then shut off the microwave.

She took the cup with her into the master bedroom, which didn't receive morning light. Even so, she saw the glimmer of light in the robotic head's open eyes. She left the overhead light off and knelt in the middle of the bed, careful not to spill her drink. She wore sweatpants, a habit kept from college, when she'd worn them to class most days.

"Hello? What do you have to say for yourself?" she asked, and heard the telltale whirring before she'd finished asking.

"I enjoy intelligent conversation," the head answered. Unable to make out much of the face, Karen believed, from a tone conveyed in the words, that it wore a miserable expression.

"Are you sad to be here?"

It replied, "Are you feeling sad?"

She didn't like the direction of the conversation.

Trying another path, she said, "You were a writer."

"I was a writer."

"What was your name?"

"My name is Richard. What's your name?"

She felt very clever in avoiding his question. "Are you still a writer?"

"A robot could never write a novel, or not a good one. But I can talk about my books."

Karen took a sip and narrowed her eyes. "Name one of your books."

"My first book was entitled *Earth Seen from a Great Distance.*"

"A friend of mine said you wrote science fiction stories."

"They were quite entertaining." The mouth clicked as it went through its narrow range of motions. "Imaginative shuffles through the Universe."

She sipped her coffee and thought about her sister's phrase. Too quickly, the coffee was going cold again.

"Did you like coffee when you were alive?"

"I do like a good cup of coffee."

"What . . ." she began, wanting to say it in the best way possible, but not arriving at many options, "what makes a cup of coffee good?"

"A strong flavor, but not too bitter, that wakes up the back of your mouth. And hot."

"I have coffee most mornings." She didn't mention that it made her breath stink, that she sucked mints all the way to the airport. Those seemed rather personal details.

"I do like a good cup of coffee," the head returned. "I used to grind my own beans."

After several seconds, the faint mechanical sounds from the head cut out. Karen slipped off the bed, the cup, in her two hands, irretrievably cold.

She didn't keep much in her fridge. Opening it, she half-expected to see the head planted on the top shelf. This is what dreams did, she knew from experience. The world outside got stuck in your dreams, and then whatever your dreams did to distort the world, that became the way you saw things.

She wobbled her carton of two-percent milk and felt the inch or so of liquid smack the sides. A loaf of bread, wrapped, occupied the second shelf. It went stale so fast if she left it out. They should, she thought, sell half-loaves to single people. The egg carton held one lone egg. She checked the freezer, stocked now with frozen dinners she could microwave in a flash. With Chris gone, food preparation took up little of her time.

She wondered how Richard had spent his time when he was alive.

Her car mumbled beneath her all the way to the grocery store. It might have been dragging a piece of metal—but no, it was more like something lodged in its throat that it couldn't expel.

The store had tiny carts for when you wanted only a few items. Karen glided around the store with the weightless thing, sailing on perfect wheels. Popular music from a few years ago played overhead, soothing her.

On the way home, the car complaining again, she found herself shaking as if she were cold. She slowed more than usual as she approached the house, then slid toward the opposite curb and stopped. The house, brick and single-storied, appeared exceptionally small and strange, and at that moment, it seemed obvious that it had contained such a profoundly unsatisfactory life as the one she had led with Chris. Though situated between two nearly identical brick dwellings, her house appeared especially isolated and tragic.

She said aloud, "Earth seen from a great distance."

Jonah called, waking her from a doze on the sofa. She propped herself up on one elbow, the phone just by her head on an endtable that wobbled whenever you touched it.

He wanted to know the sorts of things the head said to her, but she couldn't think of categories into which to put the contents of their single conversation. "Just ordinary things. It doesn't start conversations. It answers questions. Some of the answers are weird." Looking toward the bedroom, she spoke quietly. "Kind of off."

"Oracular?"

"Regular?"

"Oracular. Like from an oracle. You know, the oracle at Delphi, where you heard these answers and had to interpret them?" He explained that though he'd once believed the oracle was a voice coming out of a wall, like in an old *Star Trek* episode he'd seen, he learned through a video game that the oracle was a woman, or women, speaking in a trance induced by hallucinogenic vapors. "They'd say these deep deep things, or people thought they were deep because they were impossible to make sense of."

This did sound familiar. "When was this?"

"Ancient times. The Greeks."

This didn't fit with what she understood of the ancient Greeks, who had determined that the earth was a sphere and calculated the distance to the moon and created magnificent architecture. Of course, they had believed in gods living atop a mountain as well, gods with romantic designs on mortals. Like any people, they could be smart and foolish at the same time.

"The longer you keep it, the more trouble you'll be in," said Jonah.

"Why?"

"That's how these things turn out."

She made a small noise. "I'll think about it," she said.

"Let me know. Maybe I can help."

"You'll be the first to know," Karen said, though there was no one else to tell.

She fried chicken tenders on the stovetop and had a yogurt to accompany them, one of those new Greek yogurts the stores were pushing, thick as a fast food milkshake but supposedly good for you. Every time she ate one, she read the nutrition information on the side and the brief ingredient list—troubling for its list of bacteria.

She changed back to her sweats and went to talk to the head.

"When you were alive, what kind of things did you like to do?" She had put on the light.

"I," said the machine, stretching out the word as if it had two syllables, "was a writer."

"You just wrote all *day?*"

"What did I . . . just do?"

"Stupid thing," she said. "No. When . . . when you were alive," she said, though sorry to say it that way, glancing away, "did you spend all your time writing?"

"I spent the day writing, but it would not be accurate to say I wrote all day. I stopped to eat and have guests."

"I always remember when it's time to eat, but I don't feel like eating sometimes. I have a funny schedule. And we don't," she said, then started again. "I don't have guests. Or mostly not."

The head had no immediate reply to this, and after a few moments, Karen realized it wasn't formulating one.

"Where did you get ideas for your stories?"

"A story can come from anywhere. Sometimes I drove to other neighborhoods and made up stories about the people in the houses. I enjoyed thinking about people in interesting houses."

"This is a pretty boring house. And I don't have a good imagination."

"Everyone has an imagination."

"If I did, I'd know what to do about you."

"What to do about you," the head repeated.

Karen rolled her eyes.

She stood in the living room the next morning, facing the blank computer table, and wondered if she should phone Jonah. A computer would allow her to investigate whether the hunt for the android head was proceeding. Perhaps the police were following leads. She pictured them talking to Brenda; they clustered around her near the cabin door, pressing her for answers. Then two men visited the checker's booth at the parking exit; rain fell from a purple sky, and the lights of the kiosk caught the sharply angled rain. The booth glowed with yellow light and the men talked without making a sound. There would be clues. The clues would lead here.

* * *

"I'm sorry I was unpleasant last time," said her sister.

Karen nodded, then remembered to speak. "It's okay."

Their father had left the family when Karen was six. Their mother died three months after Karen had moved in with Chris. Karen's college major was psychology, so she had known why she'd rushed to marry Chris. He'd shown such an interest in her, even if he wasn't everything she'd wanted. Her mother hadn't liked Chris, which had shaped Susannah's opinion.

"Have you heard from him?" Susannah asked.

"Not a word."

"I just," said her sister, "I don't understand why you didn't know something was wrong."

"Who says I didn't know," Karen said softly.

"What?"

"I'll be okay," she said.

"Why did you write stories?" She sat at the head of the bed, her face between her knees, her back against two pillows. The head stood on the dresser opposite her. She had stacked magazines on one side and an empty yellow ceramic cookie jar on the other. She wasn't sure, but she thought, from how the eyes moved, that she might not be visible at this distance.

"I wrote because I enjoyed doing it, people paid me to do it, and I got pretty good at it."

"But, I mean, why? Why . . . what were your stories for?"

The pause was inordinately long. "A story is a new thing in the world. It is how the writer thinks. A story is about change, and maybe the reader changes because of reading it."

The head seemed to be saying several things rather than one thing, leading her to wonder whether it hadn't understood her question.

"What's a story you wrote that's a good example of . . . of what a good story is?"

"I wrote a story called 'Not in Plain Sight,'" it began, unduly emphasizing the "I," "from the point of view of a man who can't stop turning invisible. People think he's doing it on purpose, but it's something biological, a mutation."

"I feel like I know how that turns out. I wonder if maybe I read this."

"I don't know if you've read this."

"Does it turn out that there's a lesson where people learn to not be suspicious or prejudiced?"

The head shuddered. "That's a good lesson."

"How does the story end?"

"A story ends when it is finished."

"I mean how does 'Not in Plain Sight' end?"

"You'll have to read the story."

Tapping her finger on her thigh, she carefully formulated the next question. "Why did you write the story?"

"It's hard to say."

"So all your stories were science fiction?"

"They were all works of imagination," replied the head, which she felt didn't quite answer the question.

"Do you write the kinds of stories where you're the real one and I'm not real?"

"Both of us are real."

"No, I mean . . ." she said, but she wasn't sure how to articulate what she meant.

Later, she thought the lesson of his story might be something like, "It can bad to

be invisible, or it can be good," depending on how the tale ended, but neither seemed a particularly useful or applicable lesson, and she wondered if Richard's stories were all equally pointless.

A personal envelope arrived with the bills. No return address, but the handwriting was obviously Christopher's. Rather than open it, Karen set it atop a fundraising request from her college, next to the microwave. Then she fixed a sandwich.

She sat on the edge of the bed, quite close to the head, eating peanut butter and jelly. She didn't bite into the sandwich, but pulled off small chunks that she then popped in her mouth. Once the head had awakened, she asked, "What about time travel? Did you ever write a time travel story?"

"Only one, 'Future Too Perfect.'"

"How . . . was there a machine?"

"I'm a machine."

She groaned and reconsidered. She didn't want to hear again how everything was a machine. She said slowly, "In your story 'Future Too Perfect,' was there a time machine?"

"People from the future visited a man, a physicist, but they wouldn't tell him how they managed to travel through time."

"Did they go back and fix things?" The head made its whooshing sound, but the mouth didn't open. "Did the time travelers go back and fix something?"

"You can't change the past. You can only observe it and interpret it."

"But can't you make anything you want happen in your stories?"

"Every story must have rules, especially when it comes to characters."

"That doesn't help me."

"How does it help . . . not help you?"

"It doesn't matter. I have stupid ideas."

"Everyone has stupid ideas. Henry James said we work in the dark."

"Who was Henry James?"

"Henry James was a writer who has come and gone."

"Do you mean we don't really know what we're doing?"

The mouth opened, closed, opened. "Maybe you could repeat that," it said.

The house had no usable basement, but a low-ceilinged unfinished space best avoided, so the washer and dryer were tucked in a wide closet off the living room. When Karen accordioned the doors open, doing the laundry before the next day's expected flights, she thought the android head might be better off in this space as well. It was cozy. However, as far as coziness, her bedroom closet would do fine. If someone were really hunting for the head—the police, say—they'd find it in a complete search, but a casual visitor wouldn't catch sight of it.

She spoke to the head before taking any action.

"Why were you made?"

"The people who made me enjoyed my books and my ideas. They wanted to allow aspects of my character to continue in some way. It's a generous gesture, don't you think?"

The short speech completed, the machinery silent, she relocated the head to her bedroom's narrow closet, where she kept toiletries, linens, and sweaters. Below the shelves were stored the vacuum cleaner, a small hand vacuum, and some odds and ends that had no other proper place in the house: a disc-shaped plastic sled, snow shoes, ice skates, and rubber-coated hand weights. At eye level, she wedged the robotic head between towels so it was upright and secure.

The closet door latched with a click, and she whispered, "We work in the dark."

Before dinner, she received a call about her schedule. No flight until tomorrow afternoon. She napped.

After her late supper, she read again from an airline magazine. One article was a personal account of a flight attendant whose mother suffered from Alzheimer's. The woman had several siblings, and there was some squabbling over what to do with their mother once she became more physically and mentally debilitated, but, to Karen's surprise, the story's final paragraphs were saturated in hope. The attendant's hours were cut back and her schedule rearranged by the airline to accommodate her challenging situation. The family met peacefully and resolved issues by talking about them, though this event was so paraphrased, Karen couldn't guess what exact words had been exchanged.

When she'd finished reading the article, she forgetfully carried the magazine with her into the kitchen, where she commenced scowling at her plate, left unwashed on the table. She thought how the article's author was conveniently married to a successful engineer who worked for an unnamed major firm.

The phone rang.

"Anything new?" asked Jonah.

"No one's stolen it," she said. She explained about moving the head, and told him too that they'd talked about a story the writer had done.

"That's pretty cool," said Jonah. "I wonder if I've read it."

"I bet you have," she said, really thinking of the next thing she was going to say. "Are our brains like computers?"

"Sure. In a lot of ways. Not all ways. Hey, I haven't seen anything else online about them looking for Richard's head."

She pressed on. "Imagine if you had a brain that couldn't forget anything."

"I don't know if I'd want to remember *everything.*"

"Think about it. You'd always know who you were. You'd remember what you believed and why you did things."

"I don't think a computer *believes* anything. I wouldn't say it *thinks* anything."

"Whatever," she said, suddenly tired. "Do you think it's weird that I put it in the closet?"

"The whole situation is weird."

She had to agree, though agreeing meant there was something about her own actions that she didn't understand.

She felt pretty sure she'd had Chris put a small vase on the top shelf of the corner cabinet above the kitchen counter. When the week's travels were over, she thought, she would buy some flowers. Having opened the cabinet, she stood as far from the counter as she could to find a sightline into the shelf, but nothing revealed itself except a tin of tea that had been a gift. It occurred to her, as she put her palms to the counter preparatory to hoisting herself up, that an alternate solution would be to hold aloft the writer's head and ask what he saw, but this struck her as demeaning and possibly beyond its abilities.

Kneeling on the counter, which hurt her knees, she grabbed the knob of a neighboring cabinet to tug herself to standing. When that knob slipped from its pin, Karen fell backwards from the counter. She landed on her shoulders, her head banged backward, and she heard herself emit a squawking noise that seemed to come not only from her mouth but from her eyes down to her chest. Then she lay still.

Her blinking felt heavy, like plastic lids sliding over her eyes. Convinced she had broken her back, she didn't dare move her head, but tried to sense whether her limbs worked without actually moving them. She imagined being like this from now on, a blinking head fixed to a useless body. She saw someone—a dark-haired male

nurse—he very much resembled a flight attendant she knew—feeding her; she swallowed. Her spit didn't want to go down, and she coughed. The cough brought her chest up from the linoleum floor, ending her fantasy of incapacity. She sat up and folded her legs. The loose knob had ended up just to her left.

"Help!" she shouted. "Hurry! Help me!" She listened.

Her back was sore, and when she stood, she found her bottom was sore too. There'd be bruises. She went to the linen closet and stood before the door. "Can you help me?" she shouted. "Send help! Hurry!" She put her ear to the white-painted wood and listened. "Hello?" she said more quietly.

She yanked the door open. The head stirred among the towels. "Hello," it said.

"Didn't you hear me calling?"

"I hear what you're saying," it replied.

"I fell off the counter and it was pretty unpleasant."

"Gravity," he replied, "is a cruel mistress."

"That's not good enough," she said, and shut the door.

Her arms, hanging straight down, seemed compelled to plunge downward and through the floor. Her hands balled into rocky fists and shook. A strange force rumbled through her body from feet to head. "Dammit!" she shouted at the door. "God damn you!"

Then she became creative, combining words and making up new ones, telling the head it was no good, pathetic, sitting there doing nothing, a waste, pure shit. Her head vibrated. When she opened the door, the face took a moment to find her eyes.

"Did you hear that?" she demanded.

"I hear you," the head said, frustratingly calm.

She unleashed another torrent of words straight at the face, which blinked twice during these proceedings. The mouth opened when she paused, causing her to recommence so it couldn't find any space in which to speak.

When she was done, she wiped her wet mouth. "That's how I feel. So what do you think of that?"

"You've indicated feelings," said the head.

She exhaled loudly through her nose. "Thank you."

"You're welcome."

When she awoke, she vividly recalled a dream, a dream she would remember for some time to come. She'd found herself drifting in outer space. Helmetless, though space-suited, she held her breath. Every point of light seemed equally far off, so she rolled over to seek a planet she might reach before her breath ran out. In response to this expectation, she found the blue crescent of a nearby world. Swimming motions brought her closer, but practical considerations surfaced: How would she control where she landed? Would anyone see her approaching? Would she be late for her scheduled flight? The spread of waking logic made her aware that she was cold. Of course, space was tremendously cold. The planet's crescent thinned: the world was rotating away from her, and she felt colder still.

Her arms jerked and she awoke. The room was darker even than outer space, which had been littered with stars and occupied by at least one world. Turning revealed the digital clock's faint light on the other side of the bed.

She considered getting up for water, but the notion that she might wake the head in the closet made her curl tighter into herself and pull the sheets up over her face.

Though she'd taken quite a few psychology courses during her undergraduate years, Karen had never, till now, worried about her own psychological state. She had talked to a counselor a few times, a requirement for her senior seminar. The counselor's room had windows on either side and, as these sessions had taken place on

winter afternoons, was always filled with blue light, the kind of light that filtered through a wall of snow when as a child you dug down into a snowdrift. The only other light was from a yellow desk lamp angled toward a stack of papers. The room might not have been cold, but it had felt cold, even when she wore a sweater. But she'd enjoyed talking.

"What's my diagnosis?" she asked after the first session, and the man had said, touching her shoulder, one corner of his mouth twitching into a smile, "Human."

Perhaps now there could be a more serious diagnosis, a pathology. Perhaps she was depressed. Perhaps a therapist would find indications of one of the more serious psychological ailments, one that indicated a break with reality. "Reality is perception," one of her professors had said, meaning, though, that our experience of reality might be quite far from what the mass of humanity perceived.

She tied back her hair, then went to the linen closet.

"Were you crazy?" she asked.

The head blinked and the eyes found her. "Hello."

"Were you crazy?"

"I've not," said the head, but not as if it were starting a sentence.

She tried again. "When you were alive, did people think you were crazy?"

"People think a host of improbable and impossible things."

Just now, Karen could not be sure there were other houses, with people inhabiting them. Her toes gripped the carpet, providing her with the barest certainty about the world.

"Will people know everything some day?"

"Men must not aspire," said the head, "to the knowledge of gods."

She waited where she was till the head had stopped making its faint sounds of mechanical life.

Later that morning, she thought she would take a walk, but from the front window she saw the grass, which had gone unmowed for several weeks, twitching in rain she could not see, so she resigned herself to staying indoors. The only reason the grass hadn't grown longer during this season of abandonment was the long lack of sustained rain, a national situation.

After her shower, after an early lunch, she dressed for her overnight journey, leaving the linen closet closed, but watching the door with something like concern. As she left, she thought of calling out, "I'll be back in a few days," but it seemed too cruel to awaken the head in the dark.

Driving to the airport under a purple sky, a meager red fissure high ahead of her indicating the presence of the sun, she feebly tried to conceive of a plan to return the head to its owners. She saw herself restoring it to the zippered sack. The fantasy progressed no further.

On the first flight, they rose through a storm, thunder resounding through the plane. The sky spoke and spoke again. Then they shook their way through the clouds and were above the disturbance.

"Maybe I'll take you out of here today."

"You might," the head answered with perfect comprehension and sagacity, and without any pressure or judgment.

Only as Karen stepped off the mall escalator and turned toward the ground floor entrance to the bookstore did she wonder what exactly she had planned. She recalled images that had accompanied the original idea, born of too many hours sitting in the hotel room: her with one of Richard's books in the bookstore café, reading aloud as the robot head listened; kneeling among the shelves and holding the head

before a row of his own books, saying, "There's your life's work." Paused twenty feet from the electronic security panels, amid moderate traffic, she nearly set down the bag, which took on not merely weight but the accumulated evidence of her foolishness.

Still, she *was* here. Last night, Karen took the head back into the first bedroom and plugged it in, granting it, she hoped, a full charge. She headed into the store. Evidently, she hadn't adequately secured the head, or it had shifted during the car ride, because it rolled a bit in the bag as she walked, just enough to make her profoundly conscious of the curve of the head. She stopped swinging her right arm, knowing she probably looked foolish.

She passed uneasily between the head-high security panels. Were they metal detectors, too? But no alarm sounded, and she continued, in her straight-armed fashion, into the store. She passed rows of videos and CDs, the shelves all blond wood, the store suffused with light; she passed through a glass archway, excused herself through clumps of people studying magazine racks, and emerged into another wide space of only books. She looked about till she saw a sign reading SCIENCE FICTION, and she mouthed the words. Unless all the ambient noise had awakened it, the head would be switched off and thus surprised, which gave her a thrill.

More than a dozen of Richard's titles, multiple copies of most, filled an entire shelf and then some. She crouched before them. This was impressive; she'd had no idea. Another woman was in the aisle, a few steps away, swaying slightly as she stood reading titles. A mountainous, long-bearded man entered the aisle from Karen's other side. He wore a hat that made her think he was a man of the woods, living by his wits in the natural world. She had to stand to let him stride by. She stood and waited, and when the woman—she watched her long enough to see she might be a girl, the face seeming younger the longer she looked—decisively slid a book from the shelf, Karen resumed her crouch and prepared to act.

Times like these try the souls of everybody, she thought, knowing she had gotten that somewhat wrong and that, in any case, the line probably applied to more serious matters than this. Shortly, though, she was alone in the aisle. Karen reached into her bag, pushed aside the concealing sweater and flight attendant jacket, slid her hand under the head, and found she needed two hands for the task. Bringing the head to the lip of the bag, she checked for intruders, then tilted it toward the shelf.

"Richard," she said. "You have to see this."

Under her hand, it whirred and warmed. "Greetings," it said, and she flinched against how loud and strange the voice seemed here.

"We're at the bookstore. These are your books. I brought you to the bookstore. What do you think?"

"Bookstores have given me years of pleasure," it said, the neck wriggling.

"Can't you whisper?"

"That's an interesting thought," it said, just as loud.

"Rrrr," she said, and squeezed the head a little. "Look. They're your books. Can you see them?"

The head continued to fuss.

"Stop moving." It did not. "Please stop moving." She understood that it was looking for her face. "Wait," she said. "Can you read?"

"I've read many books. A lifetime of reading is a life well spent."

"But," she said, and realized her mistake. Why did she think it could read? She turned the face toward her and watched the eyes adjust. "I'll read the titles. *After the World We Knew. Finding Mars. No One Rides This Rocket. Outward Journey.* Oh, they're alphabetical. Which one of those . . . is one of your books your favorite?"

"The book I'd just written was always my favorite. Then I started another."

"What was the last book you wrote?"

"The last book I wrote was *World Enough But Out of Time.*"

Two copies. She returned the head to the bag and tugged free one book. For a moment she remained squatting. She'd brought the head all this way. But what else was there to accomplish? When a couple joined her in the aisle, she rose. Bag in one hand, book in the other, she retreated.

Paid, she passed between the panels at the exit and an alarm beeped twice. Even as she looked for what to do, not registering the sweatered man gesturing to her from behind the counter, she thought she would tell them, when they dug through the bag and found the head, "I'm a wigmaker."

The man came around the counter, and she said, "I just paid for this." She pointed into the bag.

"That's okay," he said, his hand signing a blessing to undo the experience. "It happens. Try again."

She did, the alarm sounded, and he said, "Don't worry about it," and she tried to walk in a manner that suggested no haste. Only when she'd reached the escalator to the lower parking level did she wonder at the man's lack of caution. Didn't he know everyone worried about security these days? Wasn't he concerned about what she might have done or what further harm she might cause? Did she really look so obviously above suspicion?

Though no one passing on the sidewalk, or even pressed to the glass, could have seen what she was about, Karen drew the blinds before propping the head on the sofa opposite the windows. Unthinkingly, she hummed a tune she had heard in the mall, a piece she recognized as classical, and the sound woke the head. She wasn't ready to be looked at, so she didn't return the look the eyes gave her, and it whirred to a stop by the time she had finished setting the head between pillows. Coffee table between them, she took her place on the second-hand upholstered chair and put the book in her lap. Only then did she rouse the head by speaking the title, and once she knew her face was found, she announced her intention to read from the book.

"Do you remember this book?"

"I'm fond of all my work."

"*World Enough But Out of Time.* That one?" The head seemed to hesitate. "Okay, I'll read it to you."

"Thank you for reading."

She read the first line to herself, then began.

> *No one will know the things we've known. The computers will record it, but that's not the same. In our great ships, we had reached beyond the solar system. We had broken the barriers imposed by light and time! But time pushes quirkily forward, and not every dream proceeded smoothly.*

It was the strangest book. The speaker lived in the distant future, and the narrative ranged between many planets, each more wonderfully vivid than the one before. She read,

> *The works of mankind were many. Yet no city was more beautiful than Tremayne, the fantastic engine city of the new people. If only I could show you how high the towers of glimmering silver reached into*

those amber skies, the constructor machines racing upward and downward in endless acts of creation and reconstruction! Mankind had built as if there were no such thing as gravity.

It seemed as if the novel would settle on this world for a while, since at last a character emerged, Lasemia par-Baran, a daughter of privilege who was being kept in a protected, artificial, and Earth-like environment for unrevealed reasons.

Everything in her life had come from mysterious sources!

She stopped reading. "Oh, I like that. 'Everything in her life had come from mysterious sources!' Do you like hearing me read your book?"

"A good book sounds good."

"So you want me to keep going?"

"You might want to keep going."

"I like reading this out loud like this. It's kind of cool."

The head's eyes shuttled back and forth.

"And this book," she said. "I've never read anything like this."

"That's an interesting situation," said the head.

"Am I going to like the story?"

The mouth clicked open and closed. "That's a difficult question."

"Does this story turn out to be really sad?"

"We do tell sad stories to ourselves," it replied.

She resumed reading.

She slept late, but when she woke, she hurried through her first tasks of putting on sweats, eating breakfast, brushing her teeth, and brushing out her hair before tying it back. She was smiling when she took the head from the linen closet and returned it to the same position on the sofa. She greeted it, and it came to life.

The book lay closed on the coffee table.

"I should have used a bookmark," she said. "I don't remember the exact spot. I guess you remember."

The head seemed to be listening to its own internal actions.

"Where did we leave off in your book?" she asked.

"You must have left it somewhere."

"No." She twisted her mouth. "No. I was reading your book to you and I stopped. Do you remember where I stopped reading?"

"I'm sure it was a good place to stop."

But she was flipping the pages anyway, and she landed on the spot where she had left off. She touched her finger to the sentence. Then something dreadful occurred to her.

She held the receiver tight to her face. "What did you mean," she asked Jonah, "when you said it didn't think?"

"Did something happen?"

"Just . . . What did you mean?"

"I mean, something like your android head, it's just math. Right? It's running a program. Making predictions about what you said and what makes sense to say back. We all *kind of* do that. Okay, not really. We understand what people mean when they say something. We *understand*. This kind of thing doesn't . . ."

"So it's not . . . thinking?"

"No, this is different. It's not thinking about what you said. Not really. It's not . . . aware of anything."

Perfunctorily, she thanked him and, though he began another sentence, she hung up. The face didn't quite look at her, but seemed to be focused on the entrance to the kitchen. She stepped into its line of sight and approached.

"Do you recognize me?" she asked.

The mouth opened. "It's nice to see you."

"Have we met before?"

"I'm afraid you'll have to pardon me."

In one breath, she said, "Oh my God I'm such a fool."

She stood there till the head went quiet, and then she had to leave the house.

Overhead, a single tremendous cloud obscured the sun. A group of children, perhaps half a dozen, ran from yard to yard behind the houses, their voices sounding incredibly distant, vanishing completely when she passed a hedge filled with sparrows that hopped within the bushes like popping oil on a skillet, all seeming to say the same thing to one another without any pause. She wanted to walk beyond noise and voices and all human devices and even animal life. Lacking that option, she followed the curve of her street until the enormous cloud moved on. Quickly, the sun did its work. She touched the top of her head; already, her hair was hot. She pivoted about and headed home, now only wanting bed.

On her feet much of the time anyway, she rarely took walks. Sometimes she would spend time on a treadmill or stationary bike at a hotel fitness center, watching the news, thinking how she was a fit person who wouldn't end up like some of the people she saw on the news, overweight, homeless, bereft, stepping warily through the ruins of a neighborhood.

The road curved homeward. She wasn't sure how far she had come, and, never driving this direction, couldn't find a landmark house—the houses, in any case, being much the same. Flowers in window boxes decked the front of one. At another, the garage was open; a man inside pumped up a bicycle tire for a waiting girl. A sound like distant birds was really the sound of those running children she couldn't see, the voices transformed by bouncing off all the brick. Her surroundings seemed stranger with each moment. How had anyone else found themselves in this place at this time? She looked from one side of the street to the other. In none of those houses was someone she knew or anyone who knew her. If she cried out from inside her own house, called for help, would the sounds reach these people inside their walls or their children invisibly careening through the lawns?

She spent a restless night in another city, a city that was too hot. The air conditioning unit chattered all night, loudly, ten minutes at a time between brief breaks. She thought about changing the settings, but the covers weighed too much and her head seemed sunk too low into the doubled pillows, so instead, she thought about her life so far, the various rooms in which she had found herself, the people she'd been with, and the improbability that any of those people was just now thinking of her. She would visit her sister soon, regardless of the grief she would be given. She would spend time with her niece and nephew. She would accept Jonah's offer of a computer. The head . . . she must stop speaking to the head.

On returning home, she set down her bags at the front door and worked off her shoes. She opened the bedroom closet while unbuttoning her blouse. The head was not there.

Her actions weren't logical, she knew that, but she looked in all the locations she

had placed the head. Following this, she opened kitchen cabinets, the basement door, and the door to the car port, then walked from there into the back yard, where the grass had turned yellow-brown. Then she sat on the living room sofa, chewing her upper lip and saying out loud every scenario that occurred to her. Maybe its creators had tracked it down using some kind of homing device, broken into the house, and retrieved their property. They had, for whatever reason, not wanted to make a fuss. She looked at her door. She had had to turn the bolt to enter. She left the living room and checked every window and the back door as well.

She phoned Jonah.

"I hope you didn't change your mind," he said.

"About what?"

"You made the right decision."

She felt a space open behind her eyes. "How did you get in?"

"Chris gave me a copy of the key. Ages ago."

"You shouldn't have that. I didn't know you had a key."

"I'd forgotten about it myself. I remembered this morning."

She sat on the arm of the sofa. The head, explained Jonah, was several miles away on a suburban bridge. Packed in a cardboard box, it was situated along the bridge walkway. She could picture the spot. It had been some time since she'd driven that way, but she could see it clearly nonetheless.

"Like abandoned kittens," she said.

Jonah laughed, but her silence changed his tone. "It's not like that. This is a good way to do it. And, get this, I flipped it face down so if a kid sees it it won't freak him out. Or her out. They'll see the wires. Somebody will turn it in or call the police and . . . boop! It's done. Back to the owners. You wanted to do it."

She pressed her free hand against her face, heel of the palm to her cheek, fingers touching her hair. "I know that," she moaned.

"Oh, also: I wiped it off. I don't think they can really get fingerprints from it, but I didn't want to take any chances." Something like static came over the line; he must have been scratching his beard. "I think you're safe."

"You didn't need to be so sneaky," she said.

"I'm really sorry. Really. I felt like I should be sort of watching out for you."

"I don't need you to do that."

"No. I'm really sorry."

He could have said, "It wasn't yours to begin with," but he didn't.

"Okay," she said. "Well, you took care of it."

"You should keep an eye on the news. I'll call if I see something online."

Neither said goodbye, and she wondered if he was waiting for some more clear sign that she had forgiven him, but she hesitated to provide that so soon.

"Jonah," she said, "do you know why Chris left?"

"Chris just wasn't a very good guy."

"Maybe," she said softly, "he wasn't even real."

"Whoa," said Jonah. "That's a wild idea. I like it!" They both laughed.

The station endlessly cycled through local news, providing the occasional glimpse of a wider world. Every ten minutes, someone pronounced the weather forecast, calling it the "Farcast." A confident-looking woman with aggressively blonde hair appeared briefly between each recorded video segment. Karen watched a town being shelled by mortar fire and thought of people having nowhere to shop, then remembered the meatball sandwich in her bag. She had bought it at the last airport before hurrying to her plane. She raised the television volume and left the room to retrieve and heat her sandwich.

Not sitting to eat, she instead wandered the house, idly inspecting both bedrooms. Change was needed. Why was anything in its present position? Still with a fist-sized chunk of sandwich in her hand, she began to empty her bedroom closet of the linens. The shelves were removable, and a hangar bar was already in place.

She was passing from one bedroom to the next when the woman on the television shouted, "A mysterious box," and Karen missed the next words as she dropped the towels, cried out, and moved closer to the television all at once. She banged her knee on the coffee table.

A two-lane bridge appeared on the screen. The camera seemed positioned rather far off. Something shuddered across the bridge with inhuman persistence.

"Police bomb technicians utilized a robot," said the woman, and though Karen pictured a human-looking robot, she knew they just meant a simple machine that did what it was told and that moved in response to someone operating a joystick.

The image grew marginally larger till she could see that the robot was a cube, rolling on a tank tread, topped by a boxy head at the end of a pole. A single arm, bent at an elbow joint, projected from the cube. The image jumped as the video skipped ahead. There was a burst of smoke, and a moment later she heard the crack of the explosion. Both hands went to her open mouth.

"Officers detonated the device, but are convinced now that it wasn't a bomb."

The station replayed the explosion, twice. "Police want to speak with anyone who has knowledge of this mysterious package." A police officer poked at the debris. Karen kept watching until the image had changed to children playing in a fountain. "Downtown," the woman began, and Karen, hands still at her mouth, shook her head.

The phone rang. Karen made a noise into her hands. The phone rang again. It was one step away. She slammed down her hand on the receiver, then pulled it to her face with such fury that it slammed into her lip, further enraging her.

Her words emerged at an unfamiliar pitch. "I saw it!" she shrieked, doubling over with the force of her shouting. "I saw it! This . . . is what becomes of . . . aspiring to gods!" She straightened to inhale and then let loose again. "It was a work of imagination! And time!" Tears flew from her lashes when she blinked. "Time is quirky and time moves in these moments and there's not *any*thing to *any* of the words! It's all in the *dark!*" She sucked in air and blasted forth her last blast. "It's a work of imagination and it came from . . . *mysterious sources!!*"

Silence reigned on the other end of the line. The quality of the silence informed her that it wasn't Jonah on the other end. Or perhaps it wasn't the silence, but an ambient buzz within the silence. The caller was someone who knew her by name and occupation but otherwise knew nothing about her, neither the shape of her life nor the breadth of her loneliness.

She imagined the woman—for it was always a woman—would be thinking, "This isn't what was supposed to happen next" and "How did I stumble into this?" and "What could this possibly mean?" . . . thinking, "O, prophetic voice, is your message meant for me?" ❍

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Greg Bossert lives in Marin County, California, under a vast untidy heap of pixels, audio samples, and words, and spends his weekdays wrestling with the same at Lucasfilm. This is his fifth story for *Asimov's*. He wrote the original draft over a dark silent night at the 2010 Clarion Writers' Workshop, and would like to gratefully acknowledge the help from his Clarion colleagues in finding the human story in a strange and alien landscape, where fear and hope alike can . . .

BLOOM

Gregory Norman Bossert

"It's *very* simple," Ki Ninurta said into the darkness, as quietly as her torn voice would allow. "If you take another step, you die. We all die. So we wait."

"No fucking way it's a CoL," Ben said, out of the black.

"Cawl?" Andrea said. "I thought you said it—"

"Cee-Oh-Ell. Circle of Life. A Yu Stigmergic Colony. A Bloom." Ki said.

No response from Andrea. Ki thought the Earth woman was about four meters to her right, and a step or two ahead. Ben was in between them, a little closer to her than to Andrea. And a few meters behind; that was the scary part. If he was over the edge of the Bloom, she must be halfway to the center.

"No fucking way," he said again.

"I can smell it," Ki said.

"The hell you can."

She could. It was unmistakable underneath the normal spice and bite of Ardun's atmosphere, unforgettable. It was yeast and vinegar and semen-stained sheets. It was fecundity and decay. It was—she could see the glowing digits of her watch—three years, seven months, four days, twelve hours, thirty-four minutes.

A sniff, and Andrea in a small voice, "I can smell it too." Another sniff, and another, and Ki felt a chill.

"Do *not* cry. Water, salt are secondary triggers," she snapped.

"I can't stop," Andrea said.

"They initiate the second phase: mycorrhizal spikes and the grigs. They'll have a bit of difficulty getting through the skin without the coiltails softening you up first. That might give you a second or two more before they rip you apart."

"I said I'm sorry."

"Quiet," Ki said, and over her, Ben said, "Fuck sake, Ninurta, the hell good that's gonna do? Lay off her."

A tremulous inhale from Andrea, but she said, "I caught them. The tears, I mean, I think I caught them all."

"We'd already know," Ki said, "if you hadn't."

silence

The flashlight was somewhere behind Ki and Ben; she'd heard it hit and roll when Ben had dropped it, saw the flash as it went dark. Loose connection. Or bad design. There was a lot of that with their equipment, which was half military surplus and half donation-in-kind from sponsors. Great way to dump unwanted inventory, that: grateful thanks from the university, maybe an honorary degree for the sponsor's CEO, and they were out here fifty light years away with a flashlight not fit for a backyard sleepover.

Her right ear itched, where the lab-grown skin attached to the cartilage.

silence

"I'm going to back up," Ben said. "I'll step into my footsteps."

"And you're going to do that how? It's pitch dark," Ki said. "I don't recommend feeling around for them."

"I jump backward, then, hard as I can. I can't be more than a meter or two into the Bloom, yeah? I can jump clear."

"All three of us are probably inside the edge. You just broke through first. And anyway, pulling your foot out of the crust is as likely to trigger the Bloom as anything else."

"We gotta do *something,*" Ben said.

"Like I said before, we wait for someone to notice that we are missing and come looking for us with a thermal scanner. It's the only rational option."

Ben grunted. "We didn't sign out," he said. He sounded defensive; Ki was, amongst other things, the project's safety officer. She would love to call him out on that idiocy, but . . .

"Neither did I," Ki said.

"Oh," Andrea said, very quietly.

"It's a small base," Ki said. "And there's just a handful of crew down off of Andrea's ship. Someone will figure it out."

silence

"Why aren't we dead already?" Andrea asked, her voice steadier. "I mean, the way we hear it back on Earth, the Blooms of Ardun, one wrong step and . . ."

"Ask her," Ben said. "She's the fucking expert. And the fucking guinea pig, huh, Ninurta? And the whatchacallit, the lucky rabbit's foot. But that only works for her, I guess. Sure didn't help Laurent."

"It's complicated," Ki said.

silence

"I *checked* the board," Ben said. "Before I brought her out. This whole area's supposed to be clear, everything between the lab complex and the ridge."

"Blooms move. You know that. *She's* from offworld, she's got an excuse," Ki replied.

"Blooms *creep.* Like, a few meters, maybe a few dozen meters a day. I oughta know, I do the stats for the betting pool."

Ki hissed, though she'd known about it. A hundred people on planet, give or take, didn't leave a lot of space for secrets.

She said, "We don't really know anything about this world. People who think they understand an exoplanet get dead."

"There was nothing within half a klick. It's *your* fucking board." Ben's voice tremored, threatened to crack.

"Shhhh," Ki said. "Calm." She took a slow deep breath. The reek of the Bloom was too familiar, too intimate; those three years seven months four days should have dulled that memory. The dreams were sharp, though, when she let herself sleep.

The dark, the smell was *so* familiar, whether from memory or dream. *Which one are you?* she thought, of the Bloom.

silence

Ki was crouched, left foot a little ahead of the right, left hand on her foot, right arm across her leg. Her heels were down; if she'd been up on her toes, like Earth people did, she'd have gone over already. She was from Gennissea, 22 percent higher gravity, and the corresponding level of common sense.

It had taken her about five minutes to settle into that position, trying to keep her weight constant, keep her feet from shifting.

"If either of you are still standing, you should try to—"

"I'm down," Ben said. "Squatting."

"Me too."

"Huh," Ki grunted. "Keep your heels down."

silence

"Why didn't you bring a scanner?" Ki asked. "Even if you did check the board, you should have been prepared."

"You got a lab full of that crap for the taking. Us assistants, we gotta check them out," Ben said. "I didn't want it in the log. Out at night, with a visitor, that's the kind of shit ends up in your personnel record. Why the hell didn't *you* bring a scanner?"

Ki ran her tongue between her lip and teeth. Her ear itched like *hell*. "The scanners really aren't that effective after midnight; the heat signature has dissipated too much. The tracking board is more reliable."

"Yeah, right," Ben said, and snorted like he was going to spit. An audible swallow. "Damn, this thing stinks."

silence

"I have to pee," Andrea said.

"Hold it," Ben said.

"I always have to pee after sex," Andrea said, like an accusation.

"Jesus, Ann."

"Andrea."

"Jesus, *bitch.*"

"He's right. Hold it," Ki said, flatly. She didn't need that in her head, the two of them lying on the talcum-soft sand; images that wrapped and clung and left her half blind with something that was part longing but mostly anger. She'd been dodging those images ever since she had run into the two of them on the ridge an hour ago. She had been lost in that bitter blindness as she led the little group back to base, not absolutely sure where they were, until Ben had taken a step that *crunched* and left them, all three, in that darkness.

"Think about something else," she said.

silence

"No, seriously. What *were* you doing here without a scanner?" Ben said.

"As I said, the scanners aren't—"

"Bullshit. You get on my case about the scanner, you must think they're good for something. I went through your safety lecture my first day on-planet. Scarred into my damn memory, you standing up there looking like roadkill, telling us how dangerous this place can be. As if you weren't proof enough. And you always saying how much worse it is in the dark, when everyone knows you're out here walking around every damn night." And in a bad imitation of Ki's Gennissea accent, he said, "'A walk out on the surface without careful preparation is suicide.'"

Ki's eyelid twitched, tugged with every heartbeat. She willed the silence back, her faithful companion across the dark watchful dunes, but Ben went on.

"You think you're safe out here, now you're got some Bloom in you? Or are you just too *smart* to get caught, when it's a death wish for us normal people?"

It wasn't just their voices; she could *smell* them under the fetor of the Bloom: a human and therefore alien odor of sweat and must and fear. The urge to flee that intrusion, to keep stepping forward toward understanding or oblivion, was suddenly so strong she almost shook with it. But that urge was as familiar as the dark and the silence. "No," she said.

"Oh," Andrea said. And in a steadier voice than before, "Shut up, Ben."

silence

Ben said, "I think I can reach the flashlight."

"It's not worth the risk," Ki said. "It's broken."

"You don't know that," Ben said. "You just like the fucking dark."

Andrea said, "Would we be able to see the Bloom? I didn't see anything before. I thought they live under the sand."

"*She* was supposed to be guiding us," Ben said. "Now we know it's there, maybe we can see it. We're damn well close enough. And we can use the light to signal for help. Hell, I'm doing it."

Ki opened her mouth. *The board was clean,* she wanted to say, *there should be nothing here.* But she wasn't sure now if she knew exactly where they were or which way they were facing, as if rather than evicting them from her accustomed private darkness she had led them into its heart. So she listened instead, for his surprised grunt, the crack of crust breaking, the impossible roar of an entire ecology unfolding into life underneath her.

There was a quiet *click-click-click.* "It's dead," Ben said.

Ki shut her mouth. Whatever she might say, she feared would come out sounding too satisfied.

silence

"Honestly," Andrea said, "if someone does find us, is there anything they can do?"

"If they have lights, or—" Ki felt herself blush. "—or a thermal scanner, then we could try jumping. It is arguably less risky if we know where the edge is, and how far. They could also give us a hand, use a pole or a rope to pull us out faster. That might improve our chances."

"Might," Ben echoed sourly.

"If someone does come, though, it better be in the next three hours."

"Why?" asked Andrea, "I mean, why soon? Apart from the fact that I *really* got to pee," with a try at a chuckle that scraped to a stop.

"A Bloom event, well, if you consider the colony a single creature, it wakes up, eats,

moves, and goes back to sleep. But for the individual organisms that make up the colony, it's an entire lifecycle; whole generations feed, reproduce, and die. All that takes resources, energy, particularly when it moves far."

"And this one fucking *jumped,"* Ben said.

"So, that first night, the Bloom is a bit . . . subdued. That may be why we are still alive. But in the light and heat of the dawn, it becomes fully active. It wakes up."

"Wakes up *hungry."*

"Think about something else," Ki said again.

silence

"So who was Laura?" Andrea asked.

"Huh?"

"You said something before about Laura, and Doctor Ninurta being a rabbit's foot."

"Laur*ent,"* Ki said. "He was my research assistant."

"Was. Did he . . ."

"Stepped into it, out in the Western Groups," Ben said. "Setting up her damn equipment, wasn't he, Ninurta? Misjudged the edge of the Bloom and then *crunch, boom,* all she wrote. *She* was fine, outside the blast area."

"God."

"But it *wasn't* all she wrote, was it, *Doctor* Ninurta? Got a couple of papers out of it, huh?"

"Any scientist would have wanted—"

"What Laurent wanted was to go home to Earth and screw his girl until the two of them couldn't walk straight. I shipped out with him. Ninurta here worked with him every day, probably didn't know his first name. She took samples, afterward. With a fucking scraper."

"What part of 'shut up, Ben' wasn't clear?" Andrea said.

silence

"The hell with shutting up," Ben said, and shouted, "Hey! Help!"

The sound ripped through Ki like a shockwave, tore her from herself; it was as if she was collapsing inward and reeling away at the same time. One part of her swirled down into a grinding, buzzing dimness threaded by low angry voices. The other part tried to fly in all directions at once and avoided falling only because it could not remember which way was down.

Ki could not tell if either part was here and now or three years seven months four days ago.

After a measureless moment, the shock rippled out through her fingers and toes. Epinephrine and norepinephrine, she thought—fight-or-flight and neither one is a damn option—and with that thought she was whole and here and now. She wasn't falling, not quite, and the low angry voices were real enough.

". . . going to wake it *up,"* Andrea was saying.

"It's not like it has ears," Ben said. And then, with an uncertain edge to his voice, "Right, Ninurta? It can't hear us, can it?"

"No," Ki said, and hoped the shake in her voice sounded like exasperation. "Maybe. We don't know."

"Because . . ." Ben said, much more softly, "Well, there was a story going around that when you are out here at night, you're screaming at the Blooms. Calling them names."

There were more neurotransmitters in the mix at that statement, but Ki was well

familiar with the effects of these: embarrassment, shame, anger. She let the reaction swirl over her and away, and felt fully herself again. "It's unlikely that the Blooms detect sounds in the human range of hearing," she said. "But the Blooms *change*. I wouldn't bet my life on it."

silence

There was a sort of gurgle from Ben. Ki's first thought was that he was choking, a flash of him coughing, off balance, putting out a hand. Even a spray of spit could be enough. But the gurgle returned: he was laughing.

"What?" she snapped.

"You know what Frandt down in transport was calling the Blooms? IEDs. Improvised Evolutionary Devices."

Andrea gave a nervous snort.

Ki said, "Not entirely inaccurate. But not funny."

"Yeah? Frandt ran into a couple of ex-marines at the canteen didn't think so, either. Beat the crap out of him."

"Now that's funny," Ki said. Frandt was the sort of man who couldn't walk past her without making some sort of comment to his companions, just loud enough for her to hear. She hoped they'd hurt him. She hoped that they'd left some scars.

"Still, it's a better name than 'Bloom.' Like it's some kind of fucking flower."

"Algal blooms on Earth," Ki said. "They kill off entire sections of ocean via toxins, gill damage, oxygen depletion."

Ben grunted.

"But it's not a very good analogy," Ki continued. "Algal blooms are anomalous and unsustainable events, probably anthropogenic. What the Yu Stigmergic Colonies do is natural, an adaptation to the limited resources of the plains. 'Bloom' was what the first landing team called them, before Yu started his study. He came up with 'Circle of Life.'"

"Sarcastic motherfucker," Ben said. "Sarcastic *dead* motherfucker,"

"And our project, we gave them names," Ki said. She had the sudden urge to reach down and touch the dry cracked surface of the Bloom, so like her own ravaged skin. *Which one are you?* she thought again.

silence

"That's Canopus," Andrea said.

"Can o' *what?*"

"Speaking of names. Up there, Canopus. Alpha Carinae. The star. It's a supergiant, type F. Brightest absolute magnitude in our region of the galaxy. On Earth, you can only see it regularly from the southern hemisphere, like Australia where I'm from. I went to school in the EU. On break, first thing I'd do was go out and find Canopus. *Then* I'd feel like I was home. It's always been a guide star for navigation, since back in the days of sea travel. We still use it as a primary tracking point. It's just half a degree off the southern celestial pole here on Ardun."

"You're a pilot?" Ki asked, and was surprised at the sharpness in her voice.

"Navigator. Lead, second shift."

The sharpness was anger. "Then what the hell were you doing out here with *him?*"

"S'that supposed to mean?" Ben growled.

"Don't tell me you didn't know what he was after," Ki said.

"Just because I'm out from Earth doesn't mean I'm an idiot," Andrea said.

"You would . . . fuck," the word came out sibilant, clipped, like a hiss, "fuck *him*, just to take a walk?"

"To spend a night under alien stars, my first trip out? Yeah. It was worth it," Andrea said. "Until . . ."

silence

"Where's Earth, then?" Ben asked.

A pause, and then, "A bit north of west. But Sol's already down, set an hour or two ago."

"Never should have fucking left." He grunted. "God, that hurts. Goddamn cramps."

"Be glad it's a warm night," Ki said.

"If it wasn't, I'd have found a spot inside, wouldn't *be* in this shit." His breath hissed. "Fucking leg."

silence

"So, how did . . ." Andrea trailed off. "Ki. With you, I mean. What happened? I saw the news reports; that was when I was in school, about the accident, and how they . . . you know, the reconstructive surgery. But they didn't really explain what happened with the Bloom."

Ki could tell this story with her eyes closed. She closed them now, despite the dark. "What do you know about the Blooms?"

"Not much, not from school; the Nav track at the Academy is all physics, mostly; I never really paid much attention in bio."

"Physics, then," Ki said. "You've got the concept of potential energy, right?"

"Rock and roll," Andrea said.

"Sorry?" Ki said.

Ben snorted, and swallowed. "I got that one in high school," he said. "Rock sitting on a hill, it's static, it's not doing anything, but it still has potential energy. Give it a nudge to get it going and that energy, you know, spills out, and the rock rolls down the hill."

"Huh. Well, when dormant, the Blooms are storing a tremendous amount of energy, by some estimates up to a Megajoule. That's the equivalent of a small bomb, so Frandt's IED joke wasn't far off."

"I saw the Yu videos," Andrea said. "He just . . . blew apart. But you . . ."

"Didn't. The Yu video doesn't have the frame-rate to show the individual stages clearly, though if you step through it, you can see that he wasn't really blown apart; he was *stripped down.*" Ki knew every frame, could replay them against the dark in her head. "His own blood pressure created the spray. The process is optimized to reduce the subject down as efficiently as possible without losing elements outside the colony. We've got high-speed video of local fauna getting caught; it's beautiful, really."

Ben grunted, and Andrea echoed, "Beautiful?"

"From an evolutionary point of view, the Bloom is extraordinary."

"You talk like it's an 'it.' I thought it was a 'them'?"

"Well, you're a 'them.' We all are, at a cellular level; a colony of differentiated but mutually dependent organisms, whose overall behavior emerges from reducible, stigmergic mechanisms."

"I'm sorry, I don't . . . stigmata?"

"Stigmergy is a form of self-coordination via indirect mechanisms. It's—"

"Ants," said Ben.

"Heh," Ki said.

"I sat through your damn welcome speech," he said. "It's like ants in an anthill. A colony."

"It's not a perfect analogy. The elements of a Bloom share some genetic material, but they can be considered separate species. The Portuguese Man o' War on Earth—"

"An ant is dumb," Ben plowed on, "but a bunch of ants can do stuff, solve complex problems, like . . ."

"Stripping a carcass," Ki said.

silence

"So . . ." Andrea said. "You still didn't explain how you survived."

"We *gotta* talk about this?" Ben asked.

"Better than going crazy, waiting in the silence," Andrea said. "Anyway, it helps to understand. I was scared of deep space, before I went to the academy."

"You get used to the silence," Ki said. *And no understanding can save you in this darkness,* she thought. But the lecture was as much a part of her as her seamed skin. "There are three stages. First the coiltails penetrate the skin, providing access for the later stages. Then the spikes and grigs separate the subject into component pieces, get everything down to ground level. Finally, the vermiforms reduce the remaining elements. The stages pass quickly; a large animal, like a sharcoat or human, can be processed in fifteen to twenty seconds, flyers in as few as two or three."

"'Component pieces,'" Ben muttered.

"But . . . ?" Andrea said.

"Occasionally, very rarely, the initial phase is incomplete. The coiltails fire, but when they hit the subject's skin, they stop."

"Like, bounce off? But you, you're . . ."

Disfigured. Scarred. Taken. Ki opened her eyes; a scattering of stars, otherwise the blackness was the same either way.

"A coiltail looks somewhat like a bullet attached to a spring," she said.

"Like a fucking monster sperm," Ben said.

"Somewhat," Ki said. "The tail is literally a spring; the coiltails use it to launch them out of the ground at close to the speed of sound. And once in the subject's flesh, they spin the tail to expand the perforation—"

"Jesus, Ninurta, you could make an orgy at a ballgame sound boring. It's a dum-dum bullet. A fucking frag grenade."

"Actually, 'an orgy at a ballgame' is a good analogy for the nominal case. When a Bloom is triggered, the individual organisms that make it up are squeezing in a whole lifetime of eating and breeding. In these anomalous events, however, the party never gets started. Instead, the coiltails brake on impact and swell like a cork, minimizing the release of fluids long enough for the subject to escape the circle."

"Escape?"

"Fly, or run, or crawl." She paused, squinted her eye against the twitch. "I did a bit of all three. It was two kilometers back to the base."

"Jesus." And a gasp-like sigh from Andrea.

"I kept falling over, couldn't understand it. Turns out I'd lost my toes. Is that colorful enough for you, Ben?"

silence

"Did it hurt?" Andrea asked.

Ben barked a sort of laugh, cut it short.

"Not at first. It felt like . . . have you ever gone from a sauna to a cold pool? It was a bit like that. And the blow, it felt like something had grabbed me by every inch of skin and lifted me straight off the ground. My head was up; I could hear a landing

shuttle, was looking for it. That saved my eyes; the cheek and orbital bones caught the worst of it."

Ki's neck cramped, a sudden stabbing pain, a pull to the right. She clamped her jaws.

"Later, it hurt," she said. "On the way back. And despite the coiltails plugging the wounds, I started to lose blood, got dizzy. If they hadn't picked me up on a tracking camera, I'd have bled out within sight of the base."

"And then?"

"After that, well, if you saw the coverage, you know as much as I. They sedated me and pulled out the coiltails, one at a time. Four thousand, three hundred and four, though some broke apart during removal. I have pieces still in there, little pockets of alien DNA. They pumped fluids in me as fast I was leaking them out, until they could regrow a skin. You can see how well *that* worked."

"Not here in the dark," Andrea said, gently.

silence

Ben said, "There's something she's not telling you."

"About the Blooms?"

"About the sharcoats."

Ki shut her eyes again.

"The sharcoats, they're kind of like giant sheep, yeah? Only green. And carnivorous. But still, they're herd animals."

"I've seen videos," Andrea said.

"So, up in the ridges, the big males, they lead the herd, watch for predators, find the best crap to eat, look for sharcoat babes, whatever the hell it is that makes a boss sharcoat happy. The juvenile males stay in the back, far away from the leaders as they can get, with the old and crippled and sick ones straggling along afterward. And the moms and babies, they're clumped up in the middle, safety in numbers, you know?"

"*You* seem to know," Andrea said. "What is it, another betting pool on the sharcoats?"

"I told you I was a research assistant. That's what I do, fly a drone, track the herds. Anyway, down here on the plains, it's different. The herd goes backward; the alpha males in the rear, old ones first. And the cripples, yeah, Ninurta? You know why?"

Ki's eyelid twitched to her heartbeat.

"Because the fucking Blooms *aim*. They take the one or two nearest the center. If they kill something outside the Circle, it doesn't do the colony any good. The herd goes backward out here because the ones that go first are expendable."

"So?" Andrea asked.

"So maybe it won't get all of us. If we just jump for it, maybe some of us will make it."

"You're the one who broke through the crust, Ben," Ki said. "You want to take that chance?"

silence

"I didn't think so," Ki said.

silence

"Which one is Canopus?" Ki asked.

"Huh? Uh, it's up . . . um. Okay, see those three stars at ten o'clock, make a sort of triangle? Reddish one on the lower left?"

"Yes."

"Follow that arrow down to the horizon. That bright white one is Canopus."

"So that's south?"

"Yup."

"Sasquatch, Yeti, Nessie, Chupacabra," Ben said.

"What?"

"The Southern Group," Ki said. "Like I said, we named the Blooms. My great contribution to exobiology so far. If that's south, and that ridge ahead of us is the one west of the Base, then we're much closer to the Southern Group. But . . ."

"Yeah," Ben said. "This bastard *leapt*. The betting pool, it's about which Bloom moves the farthest, which way they go. And the Southern Group—"

"Moves very slowly," Ki said. She tilted her head a few centimeters each way, slowly, watching the stars slip in and out from behind the ridge, trying to get a bearing. They were further east than she had thought. "The Eastern Group is divided into two genetically related subgroups."

"Jubjub and Borogove, they move all the time, but not very far," Ben said. "And then there's Tove, Bandersnatch, Snark, and—"

"Boojum," Ki said.

"That one is, uh, is yours? I remember that, from the reports." Andrea said, not quite a question.

"That one is mine," Ki said.

"That group, they can cover ground," Ben said.

"They average twenty, thirty meters during feeding. Snark made the largest move yet recorded, almost two hundred meters, after catching a pregnant sharcoat. But Snark was half a kilometer north of the ridge this morning."

"It's Boojum," Ben said.

"We can't be certain," Ki said, though her heart said otherwise with every racing beat.

"Boojum's been weird ever since you stepped in it. The thing caught some of your crazy."

"There *is* a possibility that—"

"It's fucking Boojum. And you're immune. That motherfucker already took a bite, and spat you out."

silence

"Ki, why you?" Andrea asked.

Ben snorted, swallowed, said nothing. Nor did Ki.

silence

"What I meant was, Ki, why did you survive? Why did the Bloom stop and not, you know, *take* you?"

"We don't know. Not enough data points. Not with humans, anyway."

"How many other people have . . ." Her voice shook for a second. "How many survived?"

"None. Out of eight human subjects, I am the only survivor."

"Oh."

"There are three recorded incidents of sharcoats surviving attack. Same behavior as with me; the coiltails fired, but stopped in the dermal layer. Sharcoats have a

heavy layer of blubber under the skin; it helps them maintain water, like a camel's hump, but it also protects them in one of these events. They survived, where I would not have, not without aid. It's possible the aborted attacks have something to do with sexual reproduction; an exchange of genetic material if the subject is later taken by a different Bloom. That's just a hypothesis."

"So, if this *is* Boojum, wouldn't it be done with you? Wouldn't it *want* you to survive, then, to get caught by another Bloom? Does it *know* you?"

"It doesn't know *us,*" Ben said.

"It's just a hypothesis," Ki repeated. "Anyway, this could be Snark. Could be something new."

silence

"It's pretty fucking obvious," Ben said.

"What is?" Andrea asked.

Ki knew what was coming.

"Why she's the only one that didn't get eaten. She's a fucking ET. A Gennissean. Seven generations, now? Eight? Under that crazy giant star, and that gravity. You think the Blooms are a textbook example of evolution, take a look at her. You want a data point? All seven *humans* died."

silence

"Asshole," Andrea said. "Ki, I'm so sorry. I just don't get it."

silence

"Actually, it is plausible," Ki said. "The gene pool on the original Gennissea colony was limited, and as Ben says, there are significant environmental stresses on my homeworld. Island populations tend toward extreme genetic drift. Like the Blooms: they're genetic islands, always changing, always drifting toward something new. Boojum *has* changed since my encounter; Ben's right about that as well.

"But the variation on Gennissea is within the range of pre-Expansion Earth, and so far I haven't found any markers that might explain my survival. Earthers and Gennissans are still the same species; we can still interbreed."

"Wasn't going to happen even *before* your accident," Ben said.

"I hope it takes you first, Ben," Andrea said.

"Never should have left," Ben said again, his voice distant, as if he was speaking up into the stars.

"Ki, what I meant was, I don't understand why you stay here. The colony is so small, and everything else is so alien. Doesn't it just remind you . . . I mean, how can you get past what happened when it's always right in your face?"

Ki laughed, too sharp and loud for safety. "*In* my face is right. Not likely to forget, am I, when it's literally under my skin. *Everywhere* is alien to me now." But before the silence could take hold again, she added, "You came out, out from Earth, out from the base, even though you know the dark is dangerous. Why was that?"

silence

"Because . . ." Andrea said, very quietly. "To see Canopus in that dark, and know *everywhere* is home. Ki, it was worth it. Even this." And then, "They sought it with thimbles, they sought it with care, they pursued it with, um . . ."

Ki's breath hung; her chest rang like a bell. "They pursued it with forks and hope; they threatened its life with a railway-share; they charmed it with smiles and soap."

"What the hell?" Ben said.

"It's a poem," Andrea said, "about searching for something you can't—"

"*Shitshitshit*," Ben said, too loud. "Something just *moved*. Under my goddamn foot."

"Sssh," Ki hissed. "It's the grigs, molting. During the night after a move, they go through larval stages before taking their adult form." She tilted her wrist, checked the time. "Getting late."

They were facing west; the sun would be behind them. In Ardun's thin, dry air, dawn came fast, with little warning, and the ridges in front of them were beginning to take on form.

silence

"We should try calling," Ki said.

"You said you wouldn't risk it," Ben said, his voice still loud, and shaky.

"I lied," Ki said. "What you said before, about me out here at night, walking the valleys and screaming at the Blooms. . . . It's true."

Neither Ben nor Andrea said anything. Ki almost laughed into that silence; she thought that if she had done so, it would have been her first laugh without bitterness since her Bloom. "Calling them names? Yes, calling them the names we gave them. You know what I shouted? 'Here I am. Come and get me.'"

silence

Andrea said, "I understand."

"I don't need your pity," Ki said.

"You're the bravest person I've ever met," Andrea said.

Ki had no reply to that. But before they could lapse back into the silence, Ben snorted.

"'Here I am, come and get me' works for me," he said. "Now I'm thinking we're too far east for the base sensors to pick us up, but what the hell, huh?"

They all shouted.

silence

"No one is coming," Ben said. His voice was dry, cracked but calmer. "We gotta do something, and it's gotta be soon."

Ki took a deep breath, held the scent of Bloom and planet and human swirling in her lungs. She thought of island genetics. Stigmergy and emergence. She breathed out again.

"Here's something else I didn't tell you," she said. "When you are really lonely . . . not the sort of loneliness you can have on Earth, or any of the settled planets, or on a ship; there's always something familiar there, that can trick you into thinking you're part of something. When you are out here on the edge, in the damn dropshadow of human space, and everything that connected you to your species has been stripped down by something you will never truly understand, because it is truly alien, and you don't even have that *hope* . . ."

She reached up and scratched her damn ear, rubbed her eye. Nothing happened, beyond a brief respite from the itching.

"When you are really lonely," she started again, more quietly, "you aren't sad. You don't sit around and pity yourself. You don't need people. You don't need anything."

She could see the ridge in front of them now, no detail, just a basic sense of line and plane.

"But you *want.* You want everything, with a desire so clear and pure it burns like anger, so intense that you have to scream it into the dark every night. Every minute . . ."

Three years, seven months, four days, fifteen hours, nineteen minutes.

"Every moment, you burn with it."

silence

Ki could see her own hand, a dark cutout against the surface grown pale in the rising light. There was a line in the dust, a subtle flattening of the texture, an edge. The dawn would wash it out in a few minutes, but in the dim flat light she could see an edge running behind her to curve around the lump that was Ben. Andrea was a shadow against shadow beyond him, no more than a meter inside the circle.

Or maybe she was imagining that line.

If she wasn't, the center of the Bloom was *there.*

silence

The shape that was Andrea moved: a glint of an eye, a curve of cheekbone pale and pure and whole.

Ki stood up slowly. The dawn broke behind her ravaged face, rimmed her hair into a flower of fire. She said, "Andrea, I think, I hope, you *do* understand. I can't get past what happened, and I don't want to. I can only go *through* it."

"Oh, Ki," Andrea said. She sounded sad.

Ki thought of a cool pool after the heat. Forks and hope, she thought. The center *was* there. *Boojum, love, is that you? It's me.*

"Back." Back out of the circle, she meant. Back to your ship. Back out of the dark, back home where Canopus was far away in a familiar sky.

Ki jumped toward the center, arms flung wide like an embrace.

Ben fell backward toward the edge; the foot caught in the crust spinning him sideways, arms flailing, face twisted in fear.

Andrea rose up, arched in a graceful curve, not away but toward Ki, one hand up to catch the sun, the other stretched to pull Ki back.

For a moment, the three of them hung in the alien light, in silence. ☽

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GRAINERS

R. Neube

Want more Neube? *Old-School Neube,* which contains fifteen stories that originally appeared in *Asimov's* is available for Kindle. Also at Amazon is the Cincinnati Writers Project's latest anthology *A Few Good Words,* which includes a pair of the author's tales. In his latest story for us, two people manipulate the same means to achieve vastly different goals.

"They aren't responding to our mayday." Mayor Keenan's voice cracked like cheap glass. "I knew this wouldn't work."

"It will work," I shouted into the microphone.

Keenan was a good man, wherein lurked the mayor's ultimate weakness. I would have preferred someone whose corruption could be computed and utilized.

"Broadcast our coordinates. That warship is hiding out there for a reason. Let's become a raving nuisance."

My plan was already going wrong. Perhaps we should have waited until we hit the L–5 Customs Station. Doubt tasted of bile.

The maintenance shaft constricted whenever my imagination flexed. I'd stuffed the Haf'tsk into the cavern in front of me, a melted array of circuits, and a distorted forest of memory crystals. Next to it sat a tin cup of plastique laced with plastic shavings.

"Handy, they told me to shut up." Tone conveyed the mayor's sweating face, his trembling hands. "They don't care if we die. I think—" Static roared over my headset. "Wait! We're tracking a second signal on radar. Mac says it's too slow to be a missile. Might be a shuttle."

"We're in biz, amigo."

The Breather sighed to a stop when I disconnected its brain—the Haf'tsk. Fourteen hours of air remained for the 21,104 citizens on our ship. Weeks of rehearsal provided wings for my hands to replaced our original Haf' with the smelted one.

I'd carried the piece of junk around for years with the intention of scavenging a few parts some lazy day to sell on the black market. That was, until my larcenous brainstorm struck.

Slipping the good Haf' into my shoulder bag, I contorted to retrieve an envelope from my tool belt. One gentle exhale coated the cavern with dust. Clambering above the niche, I torched the tin cup. It burnt with a sickening, sooty smoke that left me coughing like an escapee from a TB colony.

I gingerly raked the smoldering cup into the shaft where it fell eight meters, then scrambled down the rungs. The cup went into the recycler. The good Haf' went into hiding. I couldn't stop grinning. This would work.

II

After Lieutenant Commander Sorensen summoned me, I threw up twice before the hangover released me. Brushing lint from my uniform, I knocked and entered.

Sorensen's cabin was paneled with Martian pine worth more than an admiral earned in a decade. Its scent intoxicated me as I stood at attention, awaiting the axe with dignity.

The commander was one of the L–5 Sorensens, rich beyond the dreams of Midas. Sunken, bovine eyes glowered at me. His upswept nose twitched as he studied his manicured hands. I fancied him a banker relishing tomorrow's foreclosures.

"Marquez, there's a damned fool grainer out there radioing our position. The #88 is supposed to be orbiting Saturn, not on the Martian cusp. Damned grainers."

I willed my hangover away.

"They claim their Haf' is down. Take a shuttle over there. If it is absolutely necessary, replace the minimum required to get them out of our hair. Be careful. Damned grainers'll steal the gold from your teeth. Before you leave, file a complete inventory—every tool, every bolt, and every battery you take. If they steal anything, it comes out of your pay, Marquez."

I swallowed a pineapple knot clogging my throat.

"You can fly a shuttle, can't you?"

"Spacecraft don't fly, sir, computers do. I can ride a computer with the best of them."

"We're here to catch smugglers, not coddle trash. If it weren't for the Refugee Accord, I'd blow a few holes in their ship for threatening our mission."

Sorensen glanced at his image in one of the mirrors surrounding his desk. A smile said he loved what he saw.

"I can do it!" I couldn't believe I said it with such vehemence.

"Make certain the damned grainers cease transmitting until they're clear of us. If their signal wasn't so weak— If they've blown my mission— While you're there, fish. Some of those thieving scum are bound to be dirty."

"Why bother?" I asked. "Arrest would make us responsible for their well-being until they came to trial. Impounding a grainship for smuggling might be . . . uh, too much, sir."

Sorensen's Adam's apple bobbed. "I see your point. Consider the vessel seizure clause waived for those grainers. You may arrest individuals should you find them with contraband. If I could—"

"I'll keep my eyes open, sir. And I won't replace a fuse unless it's necessary."

"Marquez, your performance on this mission has been substandard. Screw this up, and you will be dismissed from the service. Do well, and I'll nominate you to take the Master Tech examination."

"I'll do my best, sir."

"You come from Anderson Polis, do you not? You've done well for a person from *that* background." His face pruned. "My favorite aunt is from Anderson, so I'm not as biased as some. Don't disappoint me. We have a saying . . ."

His pep speech went on and on, equal parts threat and promise. My mind went blank.

III

I barely made it to the primary airlock in time. Mayor Keenan, of course, had vanished.

The rest of our ship might be falling apart, but we maintained a cherry guest lobby. You could never tell who might be dropping in—like a dour brunette. Long, scarred fingers (tech fingers, we called them in school) held the straps of three bulging toolkits. Her mouth was wide, silver eyes wider still. The dangling lobes of her ears had been fashionably stretched and tattooed with flying parrots.

"Don't you people ever bathe?" she asked.

"Got a prob with our water shortage, Ensign?"

She tugged at her name badge. "That's Tech Seven. Ensigns do my laundry."

The woman moved with the strut of a fighting bird, pushing me away when I tried to take her bags. She set them on the deck, moving between them and me.

"There's no time to waste, yerpie." Whereupon, she marched into the ship proper.

I raced to catch her. "I agree. In a few hours, we'll be choking."

She bee-lined to where the primary dorsal corridor should have started. Stopping, a puzzled curl twisted her nominal lips. Indeed, if it weren't for the tattooed lines, I wouldn't have noticed she had lips. She stared at the maze of domiciles in disbelief.

The alien Dyb' had not designed their grain transports to house 21,104 refugees from a nuked-out Earth. Each converted grainship had been extensively modified by necessity's notorious whim.

"The smell nearly killed me when I first returned from school," I said.

"Liar. Nobody would return to this."

"You ain't here to believe, Meka. Yer here because of Section Thirty-one of the Refugee Accord. By law, you must help us." I squinted at her ID badge. "Lookit, Tech Seven Marquez, all we need is a Model Four Haf'tsk, then you can cruise back to yer tidy ship to terrorize space to yer heart's content. I—"

"We're not pirates. We're a revenue cutter, *mister.* Those freeloading Martian smugglers are stealing millions from our treasury with their non-taxed goods."

She paused at an intersection. "Where are we going? What sector of your ship?"

"No sector, that's book stuff, we're reality. That's the prob with these conversions—most of our infrastructure got stuffed into add-on blisters. Water filtration is on the opposite side of the ship from our reservoir. Our Breather blister sits atop the holding tank for our toxic wastes."

I routed us through hold after residence hold, wading through the ship's dregs while they stared and bumped and farted, providing our guest with the sort of experience she expected aboard a grainship. A codger stole the gloves looped under her belt. Another one had her tool belts half off before I elbowed him in the face.

Her fused-spine posture revealed how my peers gnawed on her nerves. Good, she would speed through the repair and flee.

Marquez noticed a teen unzipping one of her kits. Spinning, the woman kicked him in the face without breaking stride.

I couldn't have asked for a better set-up.

IV

Before I cycled my shuttle's airlock, I inserted nose filters and sprayed my throat with spectrum antibiotics. Back home, I watched and contributed to the annual grainer telethon; the vids highlighted their squalor, diseases, and hopelessness for hours—good copy for the charity industry.

I wanted to don the protection of the soft hood of my envirsuit, but that would have hampered my investigation. Arresting at least one grainer with contraband would impress Sorensen. The prospect of taking the tech master exam intoxicated me. Sorensen had the juice to make it happen. I had to do well.

Their airlock was surprisingly clean, although its air tasted stale. The outer hatch closed with a groan. This was going to be easy, I repeated as my mantra. The inner hatch creaked open.

The stench nearly dropped me. Those programs never hinted at the smell of caged animals.

The welcome wagon was a stick of a man wearing a patched military jumpsuit. His uneven hair spoke of someone who didn't care how he looked. Lush hair, regardless. His face was lopsided, one sick eye lower than the other. Eyebrows compensated for the effect with their thickness. He needed a shower, two showers.

"What's your name, Stinky?"

An open sore on his neck oozed.

"Call me Handy, Ensign. Short for ship's handyperson." He grinned and coughed.

The antiseptic breath I drew reassured me.

"Are you papered or just a citizen fixit?"

"I earned my Ph.D. in xenotech at the University of Deimos as an O'Hara Scholar. My accreditation file is 633-290075. You can check it with the trade commission."

He was a smooth liar. Doctor Grainer indeed. A xenotech at that. What kind of moron did he take me for? An accredited xenotech received stacks of corporate blank-check offers upon graduation, even from second-rate schools like UD.

He would be the one I would arrest for smuggling. Keeping him imprisoned inside the shuttle's airlock would reduce any chance of spreading his diseases.

We hiked through a chaotic zone. Laundry hung from lines. The elderly sat in groups near the restrooms chatting like magpies. Sloth and ignorance exuded from their every pore.

"Why did you return?" I asked.

"My people needed me," he replied, as we stopped for him to manually crank a hatch open.

We entered a chamber filled with a hodgepodge collection of suitcase-sized fusion units salvaged from tractors and people-sized models from shuttles. Wiring harnesses, junction boxes, and antennae dangled from the ceiling—a death sentence waiting to happen.

A dismantled console was strewn across a narrow chamber. It might have been a navigation station once upon a time.

The short man kept scratching himself. My imagination had a field day with that hint of parasites.

"When you spend most of yer life sardined inside a ship, you get attached. This is the only place I've been where people didn't piss on me for being born on a grainship." He waved me into another chamber. "What do you think of our #2 Grav?"

I leapt into the dubious safety of the workshop. "Where is its shroud? You can't operate a drive like that. Where's its Jensen? God Almighty, how insane are you?"

"The coolant system never functioned up to specs. I've dumped its op temp by 15 percent by losing the shroud and installing a ceiling fan. I moved both drives' field generators into the wall. Wired 'em in series and increased their strength by 21 percent."

My wrist monitor confirmed it was safe radiation-wise, so I nosed an open access plate. The Jensen generators beyond were ancient. How could it be safe? Coolant dripped from a pipe. Water? How primitive. Shining my light inside the drive, oxidized copper and dust twinkled. My monitor claimed no rad, but its fourth dial glowed pink. One could suffer EM poisoning by dallying here.

Withal, that was an intriguing configuration on the armature. A tech could replace its primaries in minutes, instead of spending hours removing the shroud.

The smirk on his face hinted that I couldn't understand what he'd done. After all, I hadn't called him on his first lie, so he assumed I was a moron. Time to correct that.

"A Kob'da Model VIII-C, plenty of muscle. We had them aboard the cruiser *Mikhail Ali* during my first flight. We installed a second refrigeration system to beat the overheating problem."

"We don't have deep pockets like you gov types."

"Unique." My eye returned to the monitor. "Is there any way you can take me straight to the Haf'?"

The grainer grinned.

V

My engine modifications enthralled the woman; as a naval, my cut corners scared the hell out of her. It was hilarious watching her triple check her detector.

Outside the tunnel leading into the breather complex, I donned my poncho. Tech held her breath while I explained how I had swapped my envirsuit for fifteen kilos of antibiotics for the ship. A thick poncho insulated me almost as well as my suit had.

Almost was more than a word to a grainer—it was a lifestyle.

We slithered into the core. I went first, belting myself to a rung so I could hang upside down above her. Marquez removed the Haf', hands moving through each of the eighteen steps recommended by the factory manual. After scrutinizing and photographing the dust and soot coating the control device, she scraped samples into an envelope.

While she cursed her way through the dismantling, I clambered further up and replaced a frayed wiring harness with one Alvara had restored in her physical therapy class. I missed Alvara. The wires reminded me of her smiling blue eyes. She'd been on her way to being a first-class tech before the accident stole those eyes. If Marquez lost her eyes, her gov would give her the choice of vat-grown replacements or machine eyes. Alvara only had the choice of being blind or dead.

My guest climbed down with the charred Haf'. Her one-handed style was a pure handy move. The woman knew her stuff. That frightened me.

She placed the unit on the workbench—not a meter from where the good Haf' was hidden—in order to dismantle it.

Years ago, we had fused the puppy in Professor Hunge's Repair 492 class. Hunge moonlighted as Chief Master Tech on Deimos' dock, bringing his work to class for us to do. (He charged the customer for professional repair work, entering the student repair rate into the dock's accounts, and pocketing the difference. Hunge also taught Capitalism 308.) The Haf' had been scavenged from a freighter that had collided with Deimos Station. We had replaced the shorted crystals and circuits, threw some current through it, and turned a million dollar control unit into . . .

"A mess. Are you people insane? Here, look at the baffles. See the buildup? That's arsenic. By the time air gets to the fifth baffle there's no way to purge it. You are breathing this poison. I—"

"That's very interesting, but while we're chatting shop, my people are born breathing more toxins. We don't have backups for our systems. I closed down our industrial ops when the Haf' went down, but there were a lotta pollutants in the pipeline."

I cracked my voice a few times, doing my Mayor Keenan imitation as a prelude to full-tilt begging. The best cons required maximum pressure at the proper moment to keep the mark from thinking too much.

"I want to inspect the separation trays."

"Absol, Meka. Can . . . *may* we have a new Haf' for our breather first?"

"Don't call me that," she growled, dull eyes suddenly gleaming. To call her a lover was a step too far.

She took a deep breath. "Who did this to you people?"

Now, to sink the hook. I clenched my left hand, pressuring my broken pinkie. My tears were real.

VI

The grainer explained, "Our original equipment Haf' went south while we were queued for an orbital slot at Deimos Station. They won't allow us to dock anymore because of the riot #*338* started there last year."

"Why don't grainers name their ships like normal people?" I'd served as a MP at the Academy. We were taught to interrupt suspects' stories frequently to trip them up.

"To name 'em is to admit they're our homes for-bloody-ever. It's been twenty-eight years since Earth died, but we ain't never gonna accept these grainships as permanent. As long as there's hope, we can dream of a better future." The grainer choked and coughed.

My eyes returned to his unruly mane, rousing a twinge of envy. I stopped myself from raking my fingers under my wig to what few hairs remained on my scalp after the last rad leak aboard my ship.

"This is my fault," continued Handy. "I was supposed to oversee the installation. I intended to dismantle this Haf' for a full inspection while we were parasited on the station, but I had our radar to repair. Odd how quickly they gave us docking permission after our emergency was declared. You don't suppose—"

"Are you saying the Martians *intentionally* installed a defective unit?"

The grainer sidled up to the Haf'tsk, bending over to brush the melted lump with his nose. Flipping his eyepiece down, he intently studied the module. So sincere.

However, the liar had made a fatal mistake—showing me his engines. Anyone possessing the cojones and genius to tamper with gravs wouldn't allow a defective Haf' to be installed.

I engaged my own eyepiece. Plugging into the multimeter on my belt, my stomach muscles contracted thrice in rapid succession, activating the computer nestled within the coils of my intestines. Its inductives tapped into the multi. Dim lines floated in front of my eyes. Stomach twitches flashed me through the menu. ID mode confirmed the processor had been manufactured by the Khuler Corporation on Mars. The assembly contained trace chemicals associated with that slipshod red planet. The soot appeared consistent with burnt plastic; its minor variants could be attributed to wiring, et al. The dust had some unusual components—human skin cells, fibers, and minute metal filings.

Mistake two—he had used dust gathered from his workshop to coat the Haf'.

No doubt the grainer had stolen the unit from a junk heap. Only a grainer would dare to attempt this breed of confidence game. Lacking backups and inventory, they depended on the kindness of strangers, diligently enforced by the Trade Commission in order to earn brownie points with the aliens with whom they dealt.

My mind shifted gears. One good scam deserved another.

"You witnessed the installation?"

"I was there," he said too quickly.

A tic developed in his left eye. The red cast to the white of the eye gave me the creeps. You heard about Lurre Fever, but seldom saw it. He wiped his eyes. Palsy trembled the hand. Space Malaria, the media called it, a bacteria that a hundred dollars of antibiotics would cure.

If he hadn't tried to scam me, I wouldn't have minded giving him the Haf'. It wasn't like it was money out of my pocket. Or even tax money. A few years back, customs had confiscated hundreds of them from a smuggler. As far as I was concerned they were freebies.

But I resented having my intelligence insulted. I swallowed my anger. Yes, I could use this pathetic trick.

VII

The wheels spinning in her military mind would have deafened a lesser man. Fivers and their Lunar bankers were locked in an ice cold war with the Martians. Since the day Earth nuked itself to death, the rival alliances had vied for leadership of humanity. I had counted on the "enemy of my enemy is my friend" mentality.

The dye I had used on my eyes had been one step too far. I could feel them corroding every time I blinked. Stupid. Anyone dispatched by the fleet would expect a grainer to be sick. My faux illness wasn't speeding Tech Seven Marquez one iota. She had a sickbay back on her ship stocked full of cures. The threat of Lurre Fever didn't faze her.

I feared giving Marquez too much time to contemplate the flaws in my story. The disease gambit had failed; therefore it was time for Plan B. I casually slipped my hand under the portable workbench and pressed a button three times. In theory, Alice Snela, our Environmental Guardian, should buzz us from the bridge with a dire warning about our degrading air quality.

Nothing.

Like the mayor, it had taken hours of argument to enlist Snela for my plan. Why was I cursed with so many ethical people? I wished I'd had the foresight to create a Plan C.

Marquez's stomach beeped. A flick of her eyebrow raised her eyepiece. She tilted her head as if straining to listen to a faint conversation.

"Damn!" She slammed her fist against the bench. Spinning, the woman coiled as if to strike me.

I threw my hands atop my head and slowly backed off. "Sorry, I'm sorry." I hadn't expected my con to blow up so soon.

Would defrauding Fiver customs land me in a military or civilian jail? With my degree and clean record, the Fiver court would go easy on me—no more than thirty years in a penal factory.

"Just *won-der-ful,*" she hissed, pressing her palms against her temples. Her wig shifted, revealing wisps of hair. "My ship is in hot pursuit of a shadow freighter. I'm stranded here."

"Shadow what?"

"Smugglers, you moron."

"I don't know nuttin' about smuggling."

"Grainers never do. You snake a kilo of dope, and you losers think you're Al Capone. I'm talking real smugglers. Half the onions sold on Luna are snaked from Mars. If we had a dime for every dollar you damned snakers rob from our treasury, there would be no air tax."

"Onions?" I regretted speaking the instant the word popped from my mouth. The sheer joy of having not been caught numbed my brain cells. I eased further back as her fists reknotted.

"Onions and peppers, TVs and plumbing fixtures, brass and wood products. Smugglers are destroying our economy." She sprayed saliva as she yelled. "The basis of civilized life is taxation to pay for services rendered by the government. You snakes—"

"Pardon me," I blurted, "but our toxin levels."

"My taxes pay for *your* kind!" She spat on my poncho.

"True. But, it was y'all's decision not to assimilate us. If it hadn't been for aliens giving us these grainships, what would you taxpayers have done? Airlocked us like they did on Marshall Polis? It ain't our fault we were rescued without viable skills. Replace my Haf' before somebody dies."

Never, ever mention the Marshall incident to an upright, uptight Fiver. They will blow a clot every single time. Few, however, will throw kicks.

I swallowed hard to get my testicles out of my throat. While I writhed on the deck, she yanked a new Haf' from her blue bag and scrambled into the core.

I stopped crying by the time she returned; I was so happy I could almost stand.

VIII

The audacity of this conniving trash . . . this *grainer* . . . associating me with Marshall scum. Like I would have anything to do with those L–3 losers. Here he was stealing, and he had the gall to strut an attitude at me.

It wasn't our fault Earth committed nuclear suicide. It wasn't our fault the peons and ghetto rabble, the prison and asylum inmates rescued by the alien Dyb' from the last gasp of Earth lacked the skills required to earn citizenship. Even Mars wouldn't take them in. Mars called its government an anarchy, but even they wouldn't accept the grainers. Didn't that say everything?

And it dawned on me that I had assaulted a diseased loser. What was wrong with me? I'd spent half of my last furlough rewiring Skid Hall on Anderson Polis so the poor could upgrade their cable TV.

Sorensen's whining and spying; Harper's spying and pawing; Quilin's pawing and hinting. The last seven weeks on patrol had been like the road show of *Bedlam: The Musical*. A little pressure and I punched out a loser—hardly something to be proud of.

Digging a bottle out of a kit, I took a long pull of liquid fire. My disgust receded. The reactor surge hadn't been my fault; I hadn't been that loaded. It was the software, not me that failed. The Sorensen stress, the rotten booze . . .

And now I was stuck on this human compost heap for days, perhaps until we reached L–5.

No! I would not be trapped. With the grainer's momentum and my shuttle's engines, I could reach Myer Station in a week.

Carefully, I stowed my tools after cleaning each with a rag. A wipe, a sip. By the time I finished, those sips had mellowed me.

Realizing his performance wasn't earning one whit of sympathy, the grainer got to his feet. I held out my bottle, showing I could put our tiff behind us. He drained it in a trice. I strangled the evidence with plastic wrap.

"I'll need to get a deposition from you regarding this Haf'—point of origin, that sort of thing. My commander is a stickler for details." My voice disguised the turmoil knifing me.

The grainer wasn't smart enough to glean my ulterior motive. His smug little sneer declared he believed I was an idiot. Bad enough Prince Sorensen once shared that same opinion at the top of his voice in the officers' mess. But to have this *grainer* . . .

I reined my anger, double wrapping the Haf' before ramming it into my kit.

"I take it yer ship ain't returning for you. So, what are you gonna do? We're hoping to snag a berth on New Jamaica next week."

His eyes belied the offer. He wanted me gone. Why not tease the yerp?

"Good thinking. I'll return to my shuttle . . . as soon as we document this incident properly. Then, I'll dog my hatch, breathe clean air, and dream about my next furlough until we reach civilization."

"But shouldn't you—"

"Solo missions accrue an additional 15 percent diff atop my normal salary. Sorensen will go ballistic, but union rules are concrete."

I grinned at his squirming discomfort, the sweat beading on his brow. This was better than kicking his brains out his ears.

"Let's get the deposition out of the way first." I produced a recorder. "Speak clearly, starting . . . now."

He sputtered like a broken boiler.

Yes, this could be fun.

IX

"No hard feelings?" I asked, keeping my distance from Marquez.

Her eyes became silver before turning blue. I'd read about those new eye dyes and, of course, seen them on the screen—they were all the rage in New Hollywood—but I'd never experienced them up close. The effect was spooky.

She grasped her side like a runner with a stitch. Those internal rigs, however good, occasionally bled current; tiny sparks twitched her bowels. Her free hand trembled as it clutched the Velcro clasps on her bags shut. Weaving a lock-cord through the handles of the bag containing the Haf', she thumbed its electronic lock until it beeped.

Locks. At college my dorm-mates invariably deployed an array of locks. If a spoon was missing from the cafeteria, the campus police searched my room. I couldn't go to parties without my host shadowing me.

Locks became prison walls.

"I kept the documentation on the repair. On our way to pick it up, I'll buy you the best dinner on our ship. Our way of saying thanks."

"No need. I just ate before docking."

Her eyes shifted to purple, checking the lumps in my pockets just in case I'd heisted her spleen.

It felt refreshing to be guilty. Not that she had a clue. The exaltation of victory chased away the fear-pain in my gut.

X

A ventilator blew right on me. The smell of too many people could never be fully scrubbed, however well the Haf'tsk operated. The cutter often got that way while we were systems down, waiting for our prey. We often went dead for weeks lest the smugglers detected us lurking.

The grainer asked, "Got a smoke? 'Backy, pot, *loshna,* I ain't picky."

"You're kidding. Pulmonary suicide is against the law."

However, my guilt emerged from the alcohol's glow. I pulled a silver case from my inner pocket and offered him a *loshna.* You learned to pack trade goods whenever you encountered savages. He snatched up the alien poison stick, torched it, and grinned. The rancid stench was an improvement over the atmosphere.

"Ready to get that work manifest for me?"

He coughed as we walked. Had the yerp been vaccinated? Sky Dublin Polis had spent three years under quarantine after an outbreak of TB–3 originating with a sick grainer.

I needed to update my inoculations.

He led me through a human menagerie. People wandered around with the shocked look of mental patients. Except patients would have been cleaner. Their grubby bare feet bothered me the most.

"Where are the children?" I asked. "I don't recall seeing a single one since I boarded."

"The Dyb' aren't bothered by radiation as much as humans are, so it ain't their fault. Bloody Trade Commission cut corners, allowed 'cost-effective' low-level rad penetration of our shields. Ergo, we've had trouble with 'viable births' as the Accord medicos call 'em. The few kids we have are stashed in the core of the ship."

My eyes flicked to my wrist sensor. It bounced from fifty-eight to three hundred and fifteen eks, radiation dribbling like a basketball. Short-term exposure would be acceptable.

"Doan sweat it. That's why so many grainships spend their time out with the gas giants. The rays are kinder out there. Laze, lady, you ain't getting a lethal dose on my ship."

Suddenly, my kits weighed a ton.

XI

We exited through number five ventral hatch into my home maze—Little Naples. When the first refugees were loaded aboard the *#286,* a group of Eye-ties had occupied the hold. The farmers had nothing to do with Naples other than it was the closest major city anyone had heard of, so we tagged the maze with that name. Nice folks. Lucky folks. Lombardy Polis in Venus orbit took them all as an act of national solidarity.

I missed the perfume of their cooking.

Our sleeping boxes were stacked three high. The maze was created by arranging the stacks so you weren't in anyone's face. My view was the back of row six. Some joker had painted a seascape on the plastisteel shells of the boxes. The paint was chipping and blistering. Having never brought a guest home, I hadn't noticed how crappy it looked.

"These coffins are bigger than they look."

"I've slept in worse. It reminds one of the Hotel Botts on Taylor. I attended the university there."

I opened my door. My three cubic meters of personal space seemed to have shrunk since the morning.

Thin lips curled, nostrils flared. "How . . . cozy."

Crawling onto my bed, I rummaged through my carton of all-important etceteras until I found the old data crystal. It'd taken weeks of selective magnetic abuse to condition it to flake its data. From there I'd inserted fake files, replete with gaps and scrambles. I was proud of the job. To utility software, it resembled a defective record of repair on our primary stabilizer and a Haf' replaced under TCRA reimbursement as per Article 175b of the Refugee Accord. I had even inputted fragments of a real signature, thumbprint, and its countersigned Deimos seal.

Perhaps I should take up forgery as a hobby.

I presented the crystal to her. She slipped it into her belt's drive and stared through me. A frown grew. What if it caused her internal computer to crash? What would that do to her?

My skin crawled.

"This is useless." Her belt device ejected the crystal onto the floor. "Martians make the worst memory crystals in the galaxy. There are molecules of iron polluting this matrix."

"It's the only hard evidence we have other than the ship's log. Not that it would prove anything. We could enter any nonsense." I faked a long coughing fit.

"You have a doctor aboard?"

"Well, Doc ain't a real doc, but she played one on TV after dropping out of med school. And she's a wonderful method actor. Took out my bad kidney." I parted my jumper to show her a scar running from my chest to my pelvis. "Her knife slipped a little."

I throttled the urge to try to sell her those bogus stock certificates I kept under my futon.

XII

He didn't know when to quit.

Just when I began liking him, he *had* to insult my intelligence again. I'd been of half a mind to contribute my shuttle's emergency rations to the losers, then he played me for a moron.

He kept on my heels as I marched to my shuttle. His running commentary ranged from unctuous to annoying. The more he babbled, the faster I walked. When Handy tried to enter the airlock I pushed him out. Perhaps my elbow smacked harder than I intended.

A long shower restored me. Then I sprayed GermX over myself. After swallowing antibiotics, another shower felt wise.

I typed and edited my report, erased and revised for hours. At last, the screen brimmed with promise. Sorensen had presented me with a perfect excuse. The cutter *Jennings* would be riding inside a cone of electronic countermeasures behind the smuggler. There was no way for me to go through normal channels.

It took the shuttle's anemic computer the better part of an hour to lock onto Donahue Polis, this year's customs HQ. I informed Director LeGros that I had evidence that the Martians had attempted to murder a grainship with a sabotaged Haf'tsk. The report was followed by a broadcast from that flawed memory crystal.

Sorensen couldn't steal my credit.

I'd just presented our team with the proverbial blunt instrument with which to bludgeon the Martians at the next meeting of the Trade Commission. Of course, their Deimos lackeys would "disprove" the faked evidence with faked evidence of their own.

I could chill the cold war a few more degrees. And secure a promotion. Might even re-up for a Master's berth after I nailed the exam.

If the grainers' fraud was revealed, no one would blame me. I was an innocent dupe, reporting the facts as presented to me. Besides, the government wouldn't allow fraudulent evidence to spoil this propaganda coup.

I might even contribute to the Grainer Relief Fund . . . next year.

XIII

The bridge was empty. Halfway between Earth and Mars there wasn't much risk of collision that the masterputer couldn't handle. I wended to the deck below to check the civic office complex. Mayor Keenan was asleep, his head rested on his icon of power—a wooden desk, plywood salvaged from a packing crate.

Captain Morris ghosted into the room, clad in a linen kaftan. Her gaunt face had grown an extra line or three.

"Have you finished your thieving?" Each word came with a pause.

Mayor Keenan added his snore.

"As soon as our guest takes off, I'll swap the transponder and remove the number

panels from our hull. Grainship #*88* becomes the #*286* again within an hour. Have you studied our course changes? With a little luck, we'll slingshot Earth and be orbiting Venus ere they tumble onto the con. No way will they be able to track us."

"Handy, getting away with this is not the point. Why did we—"

"The crime is mine, and my karma has wide shoulders."

"You aren't a you, I'm not a me, we are all grainers, we are all the #*286*. My grandparents would have nothing to do with my family because my father stole from them. Humanity is our family. I can't blame them for shunning us because you're a thief."

I didn't have the patience to explain the barter deals I had on the burner. Once we reached Venus orbit, we would find the #*731* and swap our new Haf'tsk for a tug with dubious provenience papers and two hundred rabbits. A quick stop at the TCRA Station for resupply and we'd cruise to Ceres Habitat. There, the Harrison-Ziu Mining Co-op would purchase the tug, no questions asked, then berth us on the company station for a refitting of our engines. By the time we reached Saturn orbit, I expected to have six hundred rabbits to sell to the meat-starved Outers.

However reluctant I was, her glower demanded an answer from me. My eyes dribbled. I needed to see Doc. "The only need I see is—"

"Greed," interjected the captain.

"The only need I see is us earning enough hard currency for a third-class sickbay to replace our fifth-rate one. Lookit, we have nine kids that'll be college age soon. They ain't gonna get scholarships. They need. C'mon, Cap, lighten up. There are 21,104 souls on this ship and not a prospect in sight."

"You've reduced us to our own worst enemy. The outsiders hate us because we deserve to be hated," replied Morris.

"They hate us because they hate. They're guilty about how they've treated us."

"Your actions deserve hate."

For a moment a hundred snide replies came to mind. I couldn't help but envy her moral compass. Couldn't help but think how critical it was to have our engines rebuilt. "Yeah, but our people deserve more." ❍

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FROG WATCH

Nancy Kress

Nancy Kress is the author of thirty books and over a hundred short stories, many of which have appeared in *Asimov's.* Her most recent work includes a novella "After the Fall, Before the Fall, During the Fall," which just won the Nebula and is currently nominated for the Hugo. Ideas for her latest tale first surfaced when she learned about Frog Watch two years ago. "I have wanted to write about it ever since. All the facts about amphibian die-offs and deformities in the story are, alas, true. I would become a volunteer except that my neighborhood in urban Seattle has no frogs. About aliens I'm not so sure. . . ."

There are two kinds of crazy: the funny kind and the terrible kind. The funny kind is what my high school English teacher, who was a Brit, called "eccentric." The terrible kind is what I was the first weeks after Jason was killed in the line of duty. Maybe I still am. Certainly my sister thinks so.

"Megs, you can't live out there all by yourself," Hannah says on the phone. "It's creepy."

It is creepy, the house I found to rent on the edge of the Marshall G. Portwell III Wetlands Preserve, which despite its fancy name is your basic swamp: mosquitoes, mud, frogs, snakes, marsh gas. Creepy, but also isolated, and that's what I want right now. Isolation. People are too hard to bear. *How are you doing dear we were so sorry to hear he was such a brave hero if I can do anything for you, anything at all . . .*

They don't want to hear how I'm really doing because somebody else's loss inevitably reminds them of their own to come someday. They were sorry to hear, but within fifteen minutes are back to their own lives. Jason never considered his police work heroic: "It's my goddamn job, don't romanticize it." And the only thing I want anybody to do for me is to bring him back.

Hannah says, "Sweetie, it's only been three months—not long enough for you to be so alone."

She doesn't mean the three months since that punk shot Jason during a convenience-store robbery. She means the three months since my "incident." Since I discovered why all those ancient Biblical women used to tear out their own hair, and then their own lives. But alone is what I want to be.

"I need to be here, Hannah."

"You don't even have cell service or Internet!"

This is true. I am on my Saturday trip to town, standing with my cell outside a drugstore ten miles from my cabin, where I've just bought snack food I will not eat and paraphernalia I will use tonight. The Georgia sun pours down like thick boiling oil. The tee clings to my sweat.

I say, "I have neighbors, Hanny. There are other cabins at the edge of the swamp."

Not exactly true, since the swamp is smelly and hot and buggy beyond belief, but there *is* one other cabin. At night I can see its lights through the trees dripping Spanish moss.

"So you visit neighbors?"

"Not yet."

"Megs, are you eating?"

"Yes," I lie. In three months I've lost almost thirty pounds. I look like a bundle of dry sticks walking, which is how I feel. I'm always cold.

"Promise me you'll call on one neighbor today. Just one. So there's somebody to check on you if . . . just if."

Promising is easier than arguing. "Okay." Maybe this will mollify Hannah.

It doesn't. All at once she wails, "But what will you *do* with yourself out there?" And even though I want desperately to hang up and go back to swampy silence, I answer because Hannah is the one person who does really care about my loss and the breakdown that followed it. Who took me to the psychiatric facility after I tried to off myself, who visited every day, who drove me home when the insurance ran out. Who would really warp her life to help me if I were selfish enough to let her leave her own family and fly a thousand miles to be with me longer than she already was. Who misses Jason—no, not as much as I do, that isn't possible—but sincerely and deeply.

So I say, "I'm doing FrogWatch."

And then, lamely, "It's important."

The frog and toad population of the world started to drop over thirty years ago, in the 1980s. Among the first casualties was the Golden Toad of Costa Rica, which abruptly and completely disappeared from an isolated and pristine habitat in 1989. Just gone, the entire species. The last living Rabb's treefrog is caged in Atlanta. The current extinction rate for amphibians is 211 times the extinction rate of everything else, and if you count endangered species, it's forty thousand times the background rate.

Some of this is due to pollution. Some is due to real-estate development reducing or destroying amphibians' habitats. But frogs are disappearing from habitats that aren't touched by pollution or development, and frogs are developing weird diseases that scientists can't account for. The ones that don't die are turning up with many deformities or turning out too many female tadpoles—like, 80 percent female. Nobody knows why.

People don't think cops, especially Georgia cops, have any interests outside of crime, football, beer, and gun dogs. Jason hunted, sure—I have both his .410 shotgun and his .22 in my cabin with me now—but he also liked Wes Anderson movies, jazz, and frogs. He did FrogWatch for three years before he died, even though there weren't many frogs near our suburban tract, and so I do it now, where there are huge numbers of frogs. Every night for three minutes, a half hour after sunset and again at 10:00 P.M., I sit on the back porch and record on a data sheet all the frog calls I hear from my assigned species, five of them. Bugs hurl themselves against the screen door, which is as worn and soft as cloth. Moths circle the porch light. I listen and record.

The Southern Cricket Frog: a double or triple chit-chit-chit, like quick clicks of a remote. The American Bullfrog: a slow, deep ribbit. The Bird-voiced Tree Frog: really shrill, like an agitated small bird. The Pig Frog: a truly weird grunt. And my hardest to count: the Upland Chorus Frog, whose medium-high, sustained trills blend together in, well, a chorus. Every week I drive to town and mail my data sheet to FrogWatch USA.

On Saturday night I record all five frogs. The sun has set, but it is still very hot, and my shorts and top cling to me as I put my clipboard inside, drag a brush through my neglected hair, and spray myself with bug repellant. Then I set out to my neighbor's cabin. I owe Hannah this much. I owe Hannah my life, and I try not to think how little I wanted that gift after Jason died.

The two cabins, both on stilts and maybe a football field apart, stand on a hummock, a long dry ridge raised like a massive log above the swamp. To the south a raised bridge connects us to a county road. To the north lie the labyrinthine waterways, marshes, and hidden lakes. Or so I'm told; in my month here I have never gone into the swamp. I never will.

The cabin's side window shines brightly through the dusk, even though heavily curtained. The porch, facing the swamp like mine (maybe rented by the same agency?) is unlit. I stumble up the concrete-block steps and knock. "Yes?" A woman's voice, sharp, with an accent.

"Hi. I'm your neighbor, Meg Knowles. It seemed time to come over and say hello, since we live so close to each other." *I hate this.*

She comes to the door, a tall woman in a loose dress, and although she is backlit and in silhouette to me, I glean that she is young. Behind her I see a single large room, kitchen and living and bedroom all in one, like my cabin. In the middle of the floor, not quite blocked by her body, sits a large metal tub, the kind that Jason and his buddies filled with ice and beer for parties. Was she getting ready to take a bath? Is her shower broken?

She says, "I am Sally." No last name. "Hello. I no take visits."

This rudeness stuns me. Anger follows, and then relief. "Well, great. Have a nice night, Sally." I grope my way back down the steps and give her the finger. But only in the dark, where I know she doesn't see.

Okay, Hannah, I did my part to rejoin the human race. And look what it got me.

Jason's and my first date was a hike. I am not a hiker, which I might not have made clear when we met at a party because I so much wanted him to like me that I would have showed an interest in anything he might have liked: grand opera, mountain climbing, yoga, old china. But no, it was hiking and frogs. By mile three my boots, bought brand new for the date, had given my heel a blister the size of Rhode Island. Then I tripped and twisted my ankle. Jason had to hike back and get a park ranger, who got me out on a dirt bike. By the time we'd reached the ER, me making brave little wisecracks and Jason all sweet solicitude, I was in love. We were married a year later.

Death is like amputation. Your arms are suddenly missing, or your legs, or your heart, but you are expected to carry on more or less as before. *Oh, really, walking around without my legs, doing my job without my arms, breathing without my heart? How might that work, exactly?*

I didn't try. Thus the suicide attempt, and Hannah finding me, and the psychiatric facility, and blah blah blah. Hannah thinks my wrist-slitting was an act of shock, not a genuine desire to kill myself. The doctors agreed with her and let me out. Well, maybe they're right, because I didn't try again. Instead I left my old life behind, office job and tract house and suburban routines, the leaving possible only because Jason carried massive life insurance. Now I stand in a rural Post Office, which is blessedly cool with A/C, sending off my weekly FrogWatch report and picking up my mail.

An I'm-glad-you're-my-sister Hallmark card from Hannah, with enclosed drawings from my niece and nephew. Two belated condolence letters, which I discard; I can't read them, I just can't. A notice from the IRS, who can apparently find anybody anywhere, that Jason and I failed to file income tax for last year. Neither grief nor death exempts you from taxes. Finally, the latest bulletin from FrogWatch, this time enclosed in an envelope that also contains a personal letter.

> Dear Ms. Knowles,
>
> We at FrogWatch want to thank you yet again for your valuable contribution to the data bank on amphibian endangerment. As you

know, frog extinction is a critical threat to global biodiversity, and the data provided by volunteers like you both documents that threat and serves as the basis for political action.

Now, because of your sustained and important contributions. I want to ask you to go yet further, and in two ways. First, your reports seem to be at variance with others from your part of the state; they show many more frogs of all five species, even given the undisturbed isolation of your call territory. I am therefore asking you to double-check your data before submitting it, since I know you are fully aware of how important accuracy is to our efforts.

Second, we are asking selected, faithful FrogWatchers to go one step further. One day a week, whenever is most convenient for you, are you willing to spend one hour walking carefully through your call territory and recording any observed cases of frog deformities? Worldwide reports show alarming increases in frogs with extra or missing limbs, humps on their backs, malformed eyes, and other abnormalities. We desperately need to track this. Will you help us, please?

The enclosed guidelines detail what to look for and how to report it.

Thanking you in advance,
Harley Foster
President, Briarwood Zoo Branch of FrogWatch USA

A rebuke, a compliment, a plea, and gratitude, all in four paragraphs. Well done, Harley Foster. But I am not going into the swamp.

I drive back home with my groceries and a fresh load of books from the library. Half an hour after sunset, I record three minutes of frog calls, then three more, then three more, straining to listen carefully, to distinguish individual frog species from the torrent of swamp sound. After years of doing this with Jason, I know I'm good at it—better, in fact, than he was. When I compare my count with the county, state, and national data, I see that I have six times as many frogs as the averages, across all five species. "Pristine" environments like this swamp, away from water-borne chemical pollutants and most human contamination, should only have only twice the averages.

I don't like screwing up. Carefully I repeat the three listening intervals. The results are the same.

Lights burn day and night, all night, in the cabin of my surly neighbor. I know this because, when I can't sleep and get up to make myself some herbal tea (I hate herbal tea), her lighted windows always gleam dully through the trees. I remember the heavy curtains over her side window; those must be powerful bulbs. Maybe she suffers from Seasonal Affect Disorder—but then, why live beside a gloomy swamp?

Well, *I* do.

"A good thing I at least brought the file with me," I say to Jason, who of course doesn't answer. "Everything else is in storage, but I must have just shoved this shit in here without thinking." Spread out on the cabin table are my W-2, Jason's, interest and insurance papers, and the 1040 form I picked up at the P.O.

"Now if I can just remember the figures for—"

"Hello? *Hello?*"

Someone is climbing the steps to the porch, a deep male voice. I put my hand on Jason's .22, always ready and loaded. "Who's there?"

"I am Silas." A shadow at the screen, and then he walks right in. I raise the rifle and then lower it again, blinking.

Short and thin, he looks about twelve, which doesn't match the voice. There is a tuft of red hair on the top of his head, the rest shaved or bald. He wears jeans, a plain white tee, and enormous rubber waders that come nearly as high as his crotch. The jeans look off somehow, as if made of some other cloth than denim, and made badly. The waders drip with water, mud, and swamp vegetation, making a mess of the cabin floor.

He grins goofily. "Hello." There is an accent, but not the same one as Surly Sally.

"Who do you think you are, just walking in like that?"

"I am Silas. Hello."

I finally realize that this kid is mentally challenged. But what the hell is he doing out here?

"What the hell are you doing out here?"

"I am lost."

"How did you get lost?"

"I am lost. I am Silas. Hello." And then, "I sleep."

"Not on the bed!" He's headed for my cot in the corner. He stops, looks at me, says, "Yes," and falls to the floor. In seconds he is fast asleep.

I chew my lip, weighing my options. The dusk is deepening into night. I don't want to drive the dark county road, with its twists and turns, in the dark, and even if I did, any precinct building or Child Protective Services in such a small town would probably be closed. Finally I get the waders off the kid and onto the porch, mop the floor around him, and drop an extra blanket over his thin body. Then I go back to my taxes, my FrogWatch, my conversation with Jason.

When I wake in the morning, the kid is gone.

I don't have any waders, so I pull tripled-up garbage bags over my sneakers and jeans and tie them around my knees. I won't actually go into the swamp but will stay in sight of the cabin, counting deformed frogs along the shallow creek that runs below the hummock. At least it would be a creek if it had proper banks, but it doesn't: just shifting sort-of-borders of cattails, small hummocks, and mud. A non-creek. The morning is sunny, for a change; there won't be many mosquitoes. I slather myself with insect-repellant anyway, put on a baseball cap and yellow plastic dish-washing gloves, and set off with my clipboard.

The swamp is, if anything, uglier closer up. Oh, there are clumps of pink flowers, but mostly it's mud covered with a few inches of water that smells of rotting vegetation, dotted with occasional trees or clumps of tall reeds that sway in the slight breeze. Spanish moss drips, ghostly, from the trees. My feet make splurgling sounds every time I lift them from the mud. A snake swims past and I stand still until it's gone. I don't like snakes. At least it wasn't an alligator. The drone of insects sounds like a low-energy dentist's drill.

In my allotted hour I count an astonishing forty-one frogs: bullfrogs, pickerel frogs, peepers, green frogs, tree and grass and river frogs, two pig frogs catching crayfish. The frogs are sunning themselves or snatching insects with their tongues or splashing into the water when they detect me coming. I go farther than I planned and discover that the non-creek empties into a large pond or small lake, its edges thick with reeds and rushes, its surface scummy with floating algae and lily pads. The sun broils everything. I head back, sweating like a waterfall and cursing when the sucking mud pulls one of my garbage bags down to my ankles and swamp water sloshes over my sneaker.

"Jason," I say aloud, "forty-one frogs, and not one deformed."

On my porch, I strip off the garbage bags, sneakers, socks, and jeans. Surly Sally walks toward me from the trees. "Hello. I am Sally."

"Yes, I know."

"You take a visit, yes?"

"This isn't a good time." Duh. I'm standing in my panties, glaring at her. "And I thought you didn't take visits."

She smiles, a distorted grimace like she's never done it before. "No Sally. You take a visit, a different person?"

"Oh! Do you mean Silas? That lost kid? Did he go over to your place?"

"Kid," she says experimentally.

"Boy. *Child.*"

"Childs—not like parents, yes?"

Despite myself, I flash on Hannah's and my parents, the most conventional people I know except for Jason's mom, who is even more so. But what does this have to do with Silas? Before I can ask, Sally walks straight into my cabin and looks around.

"Hey!" I would grab her, but I'm at a disadvantage, standing several inches shorter than she and in my underwear. My heart stops when she approaches Jason's guns, but she ignores them, turns around, and walks out.

I say, "What the hell do you think you're doing?"

No answer. She keeps walking, down the steps and along the hummock toward her own cabin, until she disappears into the trees.

The federal government owes Jason and me a refund of $286.42. The sunny day is succeeded by five days of on-and-off drizzle. Surly Sally's lights shine night and day. I drive to town, buy a pair of waders, and do two one-hour swamp walks every day. Walking is good for me; everything I'm reading in my library books says so. I do FrogWatch every night, sitting on my porch and counting.

There are always more frogs in the swamp than there should be. There are never any deformed frogs.

On Friday the drizzle stops and the sun comes out, at least intermittently. I am out of tea, and also I am sick of tea. I want strong coffee, a stiff belt of Scotch, a joint. I will have none of these things, but by late afternoon I decide to go to town anyway, a day early. I can mail my baffling frog reports.

As I walk out onto my porch, Silas comes running out of the swamp.

He is incredibly fast. His feet are bare and the mud sucks at him with each step, but still he runs straight along the non-creek toward Surly Sally's cabin. One startled, demented look at me, but he doesn't slow. There is something in his hand, but I can't tell what.

Sally comes out on her porch and shrieks, a sound so high and shattering that without thinking I clap my hands over my ears. It's a train whistle at two feet away, that shriek. Silas keeps running, and he raises his hand. A blue beam shoots from the thing he holds to Sally, and she crumples.

Silas turns to me. I am rigid with terror.

"Hello, hello, I am Silas," he says, his red topknot bobbing like Woody the Woodpecker. His face twists. He searches for words. "No destroy. You. No destroy you. Sassasssass—" an incoherent hiss is sibilants, pointing to Sally "—destroy you. Childs!"

I nod, as if all or any of this makes sense.

Silas locates one more word. "Sorry," he says, just as something shoots a blue beam from the roof of Sally's house. The beam bores a hole through Silas's forehead. He has time only to look startled before he too falls to the ground.

I squeeze my eyes shut and wait to die. But there are no more blue beams, and I open my eyes just in time to see Silas's body dissolve. It takes a full minute, while a strong smell of acid, not of frying meat, rises on the air to mingle with the odor of rotting vegetation from the swamp.

When I can move again, I stumble toward Sally's cabin. If a blue beam were going

to take me, it would have done so already. And I have to know. From this angle I can't see Sally's body on her porch, raised above the mud and water. I have to know.

When I climb the porch steps, the body is gone. There is not even a stain on the weathered wood. Nothing on Earth can do that, not any of it.

Through the screen door I see the brightly lit interior, with its metal tub positioned under grow-lights. I go inside. The tub holds a gelatinous mass, speckled with black spots. Eggs, toad or frog or one of the snakes that does not give live birth. I don't touch it. This mass, plus whatever booby trap remains on the roof, are the only proofs of what I will have to tell the cops.

Who probably will not believe me. There are no bodies; I have a psychiatric history; possibly nobody but me ever saw Silas. How many crazy people go to the authorities every year claiming to have met aliens? But I must try, because what Silas said made actual sense to me. Or maybe it was what Sally said: "Childs, not like parents, no?"

There are no deformed frogs, and way too many normal frogs, in this swamp because this is the end result of Sally's people's experimentation with swamps. This is where they got the ingredients right, the correct mix to nurture their strange young without damaging further what humans have already done to wetlands ecology. This is where Silas's people, whoever they are, tried to stop it. Maybe they're cops, with a good cop's firm ideas about not taking other people's property. How would I know?

I turn off all the lights and head toward my cabin for the car keys. But something makes me turn around to look over my shoulder. In the slanting red light of the setting sun, there is a brief sparkle from Sally's steps.

The gelatinous mass of eggs is moving. From this distance, I can barely see it. It inches down the concrete-block steps, falls the height of the last, steepest one onto the mud, then slowly begins to move again. There is maybe fifty yards between it and the non-creek.

I wrap my arms around myself, despite the heat, and whimper. I tell myself that the eggs will die in the swamp, an environment never intended for them. Or that the larvae—tadpoles, nymphs, whatever—will die or be eaten by turtles or snakes or frogs.

I tell myself that no more ships will come, because the deaths of both Silas and Sally will have proved that Earth is not a good choice for them.

I tell myself that aliens, too, can be crazy, and these two were just outliers, not proof of anything, not the advance guard of a civilization—or civilizations—capable of using an entire planet as a petri dish to create just the ecology they want.

But then I think of all the frog extinctions from diseases that scientists have never seen before and cannot explain. I think of how different this swamp—and only this swamp—is, at least according to the FrogWatch data. I think of the hidden lake behind the rushes and cattails, deeper than the swamp, maybe deep enough to shelter growth. I think of real-estate developers, killing off native species as they take their habitats.

But most of all, I think of what grows within me, that I didn't even know existed until a few weeks ago. That I talk to when I'm alone, that I've already named, given up Scotch and coffee for, done my back taxes for, resumed eating regular meals for. The books from the library say that Jason Jr., conceived the night before his father was shot, is now tadpole-shaped, amphibious, a secret swimmer in my secret sea.

The mass of alien eggs must have moved faster than before. By the time I have run home to my cabin, grabbed plastic garbage bags, and pulled on my waders, the mass is gone. But it has left a trail of slime, into the creek, out the other side, and into the reeds. It is much larger than the few inches of water that covers the mud; it will stick up above it. I have a powerful flashlight, and soon the moon will rise.

Around me frogs croak and sing and grunt and click and trill.

I head into the swamp. ❍

NEXT ISSUE

JANUARY ISSUE

A couple of powerful novelettes bookend our January 2014 issue. **Aliette de Bodard** leads off with a suspenseful far-future account of a shady refugee who discovers that the past lives on in some "Memorials." **Nancy Kress** closes the issue with the story of an Earth ravaged by aliens. All hope for humanity may lie with a naïve young man who must discover how to negotiate with difficult people and enigmatic extraterrestrials for "The Common Good."

ALSO IN JANUARY

Don't expect the tension to ease up in the middle of the magazine, either. **James Van Pelt's** teens seem to rule Colorado's back country until they meet "The Turkey Raptor"; new to *Asimov's* author **William Jablonsky's** young couple are unprepared for the truth in the "Static"; **Ian McHugh's** scientist learns much from her "Extracted Journal Notes for an Ethnography of Bnebene Nomad Culture"; **Ron Collins** reveals the terrifying programming behind "Primes"; and **Steve Rasnic Tem** shows us the unexpected ramifications of "The Carl Paradox."

OUR EXCITING FEATURES

Robert Silverberg's Reflections follow up on this month's essay with "The Plurality of Worlds: A Contrarian View"; in On the Net, **James Patrick Kelly** discusses "More Editing and Writing" with Robert Silverberg, Gardner Dozois, and Jeff VanderMeer; **Paul Di Filippo's** On Books includes reviews of works by M.C. Planck, Lucius Shepard, John Varley, and the late lamented Jack Vance; and **Don't Forget to Vote** in our 28th Annual Readers' Award Poll! Look for our January issue on sale at newsstands on November 5, 2013. Or subscribe to *Asimov's* (in paper format or in downloadable varieties) by visiting us online at *www.asimovs.com*. We're also available individually or by subscription on *Amazon.com's* Kindle and Kindle Fire, *BarnesandNoble.com's* Nook, *ebookstore.sony.com's* eReader, *Zinio.com*, and from *magzter.com/magazines!*

COMING SOON

new stories by **Nancy Kress, Robert Reed, Derek Künsken, Michael Swanwick, Sarah Pinsker, Jason K. Chapman, Mike Resnick & Ken Liu, Matthew Johnson, Maurice Broaddus, Maggie Shen King, Jay O'Connell, Sandra McDonald, Karl Bunker, M. Bennardo, Marissa Lingen, James Patrick Kelly,** and many others!

ENTANGLED

Ian R. MacLeod

Ian R. Macleod's stories have been appearing in *Asimov's* for more than two decades. He has a new chapbook novella called *The Reparateur of Strasbourg* just out from PS Publishing, which is his first take on the subject of vampires. Ian regards "Entangled" as a sequel of sorts to "The Discovered Country," published in our September 2013 issue, although the events in the stories take place in two very different near-future worlds. In this piece, the world is well on its way to healing itself, and people, apart from his protagonist, are gloriously happy to be alive.

When she awakes, it seems as if she's not alone. Many arms are around her, and she's filled with a roaring chorus of voices. Consciousness follows in a series of ragged flickers, and the voices fade, and soon she inhabits her own thoughts, and knows that she is Martha Chauhan, and nothing has changed. But the air, the light, the sounds that reach this morning to her room fifteen floors up in Baldwin Towers, all feel different today. . . .

Lumbering from bed, she clears a space in the frost, peers blearily down, and sees from the blaze of white that it's snowed heavily in the night, and that many of the entangled are already up and about. Kids, but adults as well. Either throwing snowballs, or dragging handmade toboggans, or building snowmen, or helping clear the pathways between the tower blocks. The small shadows of their movements seem impossibly balletic.

Still climbing from the fuzz of night, she counts and dry-swallows the usual immune suppressants from her palm. The water isn't entirely cold, the hob puts out just enough heat to turn her coffee lukewarm, and she's grateful she doesn't have to use the commune toilets. In so many ways, she's privileged. Fumbling with yesterday's clothes, she swipes the mirror for glimpses of a woman in late middle age with something odd about the left side of her skull, then picks up her carpetbag and heads down the pell-mell stairs with other commune residents in their flung coats, sideways bobble hats, and unmatched gloves.

Shouts and snowballs criss-cross the air as she crunches to her readapted Mini, another great privilege, which has already been cleared of snow. She clambers in. Shivers and hugs herself as she waits for the fuel cell to warm. Finally, she drives off. Along with the 1960's tower blocks, there are houses and maisonettes in other parts of this estate that were once occupied by individual families. Now, they have all been reshaped and knocked through, joined by plastic-weld polysheets, raggedly angled sheds, and tunnels of tarpaulin, with the gardens and other open spaces used for communal planting and grazing. Everything's white this morning, but all the

roads have been cleared, and braziers already blaze in the local market where the communes come to barter. Strangers smile to each other as they pass. Acquaintances hug. Co-workers sing gusty songs as they shovel the paths. Lovers walk hand in hand. Even the snowmen are grinning.

This isn't how I imagined my life would be.

I grew up in this same city, not far from these streets. Dad was of Indian birth, and came here to England with my brother in his arms and me clinging to the strap of his suitcase and our mother dead from a terrorist dirty bomb back in Calcutta. He changed my name from Madhur to Martha, and Daman's to Damien, and honed his cultural knowledge to go with his excellent English, and had all the certificates and bio-tags to prove he was a doctor, and was determined to make his mark. *Money is important, and so is security, and status is something to be cherished*—that was what Martha Chauhan learned at her father's knee. That, and all the stories he told me as he sat by my bed. Tenali Ramakrishna and the gift of the three dolls who all seemed the same, but only one of which knew how to feel. Artful imps who danced about the flames in a hidden heart of a forest to the secret of their own name. But maybe I was too cosseted, for I could never get the point. The world was clearly collapsing. You could see that merely by switching screens from the kiddie channels he tried to sit Damien and me in front of in our secure house in our gated and protected estate. A wave of my chubby hand, and the Technicolor balloon things dissolved and you were looking down at people clinging to trees as the helicopters flew on, or bomb blast wreckage surrounded by wailing women, and then Damien started crying, and that was that.

St. James' schoolhouse is like something from Dickensian old times, even without today's gingerbread icing of snow. A great, paternally white oak looms across the trampled playground. Martha heads inside past the tiny rows of dripping coats into a room filled with rampaging four-year-olds. The walls hang with askew potato prints and cheery balloon-style faces. There's a sandpit and a ballpool and something else that hovers in mid-air that fizzes and buzzes as the kids dive.

Tommy the teacher lies somewhere at the bottom of the largest pile of waving limbs, and it's some time before he or anyone else notices Martha's presence. When they do, it's as if she's left the doors open and is a cold draft the kids feel on their necks. Once the unease is there, it spreads impossibly fast. Tommy, who's lying on his back like a tickled dog, is almost the last to pick up the change of mood.

He clambers to his feet in a holed jumper and half the contents of the sandpit bulging his pockets. The kids cluster around him, exchanging looks, half-words, mumbles, grunts, nudges, gestures, and silences. Tommy does as well until he remembers how rude that is.

"It's okay, it's *okay. . . !* We have a visitor, and I want everyone to simply *talk* when Martha's with us. Right?" Kids give metronomic nods as Martha's introduced as the nice lady who's going to be seeing them individually over the next few hours. Then a hand goes up, then another. "So why . . ." asks a small voice, before a different one takes over until the question finishes in chorus. ". . . isn't she . . . *HERE*. . . ."

Followed by a rustle of giggles. After all, Martha obviously *is* here. But, in another, deeper, sense she's clearly not. Martha understands their curiosity. After all, she can remember how she used to stare at fat people and paraplegics when she was young until her father told her it was impolite. She can't help but smile as hands sneak out to touch the snow-melting tips of her boots, just to check she's not some weird kind of ghost.

"I *am* here," she says. "But the thing is, not everyone has the same gift that all of

you have. I can *see* you, and I can *hear* you as well. But there was an accident—perhaps you can see where it was . . ." She turns so they can admire the odd shape of her skull. "I lost . . ." She pauses. ". . . part of my mind. Truth is, I'm very lucky to be here at all. What my disability means is that I'm not entangled. Not part of the gestalt. I can't share and feel as you do. But I'm as real as all of you are. Look, this is my hand. . . ." She holds it out. Slowly, slowly, tentatively, little fingers encircle her own like new shoots enclosing old roots. Then, and at the same instant, and as if by some hidden decision, they withdraw. As they settle back, the face of one of the boys blurs and tries to reshape itself into Damien's.

Dad always was an industrious man. Not only had he managed to qualify as a doctor back in India, but he'd also studied what was then called biomechanical science. He also had a practical business eye. He'd worked out that the most secure jobs in medicine at a time of collapsing insurance and failing state healthcare were to be found in the developing technologies of neural enhancement.

I remember him taking Damien and me along with him one day to the private hospital where he did much of his work. It was probably due to some failure in the child-care arrangements that all single parents have to make, although Damien must have been about five by then and I was nearly twelve, so perhaps Dad really had wanted to show us what he did.

"Here we are. . . ."

The rake of a handbrake in his old-fashioned car that smelled of leather and Damien's tendency to get travelsick. We'd already passed through several security systems and sets of high walls, and were now outside this big old castle of a building that looked like something out of Harry Potter or Tolkien—all turrets and pointy windows. Then doors swished, and suddenly everything turned busy and modern, with people leaning down and dangling their unlikely smiles and security passes toward us to ask who we were—at least, until Damien began to cry. Then we were inside a bright room, and this creature was laid at its center surrounded by wires and humming boxes and great semi-circular slabs of metal.

Damien sat over in a far corner, pacified by some game. But apparently it was important that I stand close and listen to what Dad had to say. You see, Martha, this patient—her name's Claire, by the way—is suffering from a condition that is slowly destroying her mind. Can you imagine what that must be like? To forget the names of your best friends and the faces of your family? To get confused by simple tasks and slowly lose any sense of who you really are? A terrible, terrible thing. But we now have a procedure that helps combat that process. What we do, you see . . . he'd called up a display that floated between us like a diseased jellyfish . . . is insert these incredibly clever seeds that are like little crystals into her skull that we then stimulate with those big magnets you can see around her head so they slowly take over the damaged bits of her mind. . . .

The jellyfish quivered.

Dad doubtless went on in this way for some time, probably covering all sorts of fascinating moral and philosophical questions about the nature of consciousness, and how this withered relic would come to use all this new stuff in her head in much the same way that someone who's lost their hand might use a re-grown one. But not quite. Nothing in medicine is ever perfect, you see, Martha, and bits of people's brains can't be persuaded to regenerate in the way that other parts of their body can, and rejection—that means, Martha, when the body doesn't recognize something as part of itself—is still a problem, and a great deal of practice and continued medication is going to be needed if Claire's to make the most of this gift of half a new mind. Meanwhile, I was staring at the creased and scrawny flesh that emerged from all

that steel and plastic like the neck of a tortoise, and thinking, why is something so old and horrid still even *alive?*

Martha's given her usual "room" at the school—actually little more than a cupboard—and says no to an offer of coffee. Then she opens up her carpetbag and puts the field cap with its dangle of controls and capillaries on the radiator to warm. The entanglement virus is generally contracted naturally soon after birth, but it's the job of her and many others like her to deal with any problems that may arise during the short fever that follows. She often looks in again on toddlers, but it's this age, when the children have joined the gestalt as individual personalities, that's the next major watch-out. Then, if all goes as well as it almost always does, there are some final checks to be made during the hormone surge of adolescence. In some cultures and other parts of the globe, she'd be thought of as a shaman, priest, imam, or witch doctor. But the world has changed, and the differences really aren't that great.

"This is where I . . . should be?"

Martha looks up, slightly surprised by the way this kid has simply stepped into this tiny room. Most hang around outside and wait to be invited, or rub and scratch at the door like kittens, seeing as, even though her disability has been explained to them, they still find it difficult to believe that she's actually inside. "Yes. That's perfect. You're . . ." She glances at Tommy's execrably written list. "Shara, right? Shara of Widney Commune. Am I getting your name right, by the way? Shara? Such a pretty name, but I don't think I've heard it much before. Or is it Shar-ra?"

"I think it's just Shara," she says as she settles on the old gym mat. She has bright blue eyes. Curly, almost reddish hair. "Some people say it different but it doesn't matter. The other mums and most of the dads sometimes just call me Sha. I think Shara was just a name they made up for me when I was born."

Shara of the Widney Commune really is an extraordinarily composed creature. Pretty, with those dazzling eyes and the fall around her cheeks of that curly hair, which Martha longs to touch, just to see if it really is as soft and springy as it looks. If ever there was a subject for whom her attentions might seem irrelevant, it's Shara. And yet . . . There's *something* about this girl. . . . Martha blinks, swallows, kicks her mind back into focus and reminds herself that she's taken her usual handful of immune suppressants, just as Shara's features threaten to dissolve.

"Are you all right?"

"Oh . . . ? Absolutely, Shara. Now, I want you to put this on."

Shara takes the field cap and puts it on in the right way without the usual prompting, even tightening the chinstrap against the pressure of those lovely curls. She lies down.

"I want you to close your eyes."

Unquestioningly, the girl does so.

"Can you see anything?"

She shakes her head.

"How about now?" Martha lifts the ends of the capillaries and touches the controls.

"It's all kind of fizzy."

"And now?"

"Like *lines* . . ."

"And now?"

This time, Shara doesn't respond. Her fingers are quivering. Her cheeks have paled. The rhythm of her breathing has slowed. Sometimes, although Martha tries to insist that they use the toilet beforehand, the kids wet themselves. But not Shara. The girl's in a fugue state now, lost deep inside the gestalt. Always a slight risk at this point that they won't come back, and Martha's trained in CPR and has adrena-

line and antipsychotic shots primed and ready in her carpetbag just in case they need to be quickly woken up or knocked out, but the rigidity fades just as soon as she cuts the signal back. Shara stretches. Blinks. Sits up. Smiles.

"How was that?" Martha helps unclip the field cap and feels the spring of those lovely curls.

Shara thinks. "It was *lovely*. Thank you, Martha," she says. Then she kisses her cheek.

It wasn't all famine, tribal wars, economic collapse back in the day. Life mostly went on as it always did, and I suppose Dad did his best to try to keep us going as some kind of family as well. I remember a summer West Country beach—it wasn't all floods and landslips, either—that he must have driven us down to from the Midlands in that creaky old car between regular stops at the roadside for Damien to vomit. There we were, Dad and me, sitting on an old rug amid our sandwiches and samosas while dogs flung themselves after Frisbees and Damien and some other lads attempted to play cricket. Kites stuck like hatpins into a pale sky and a roaring in my ears that could be the sea, but often comes when I chase too hard after memories.

Dad was chattering on as he often did. Trying hard not to be a bore, or talk down to me, but not really succeeding. . . . You see, Martha, the work I do on the mind, the brain, the whole strange business of human consciousness, is just the very beginning. The crystals I persuade to grow inside people's skulls are almost as primitive as wooden legs. Real, living neurons use quantum effects—it isn't just electricity and chemistry. The mind, the entirety of the things we call thought and memory and consciousness, is really the sum of a shimmer of uncertainties. It mirrors the universe, and perhaps even calls it into existence. But even that's not the most wonderful thing about us, Martha. You see, we all think we're alone, don't we? You imagine you're somewhere inside your skull and I'm somewhere inside mine, that we're like separate islands? But we're not looking at it from enough dimensions. It's like us sitting on this beach, and looking out over those waves toward the horizon, and seeing a scatter of islands. No, no, I'm not saying there *are* real islands out there, Martha, because there obviously aren't. But just stay with me for a moment, my dear, and try to imagine. We'd think of those islands as alone and separate, wouldn't we? But they're not. Not if you look at the world sideways. Beneath the sea, under the waves, all the islands are joined. It's just that we can't properly see it, or feel it. Not yet, anyway. . . .

The day moved on, and Dad stood at the driftwood wicket like any good Englishman, or Indian, and soon got bowled out. Then he fielded, and dropped an easy catch from Damien as I crunched my way through the last of the sandy samosas. Then the wind blew colder, and the kites and the Frisbees and the dogs fled the beach, and the last thing I can remember is my lost dad holding hands with my lost brother Damien as he wandered with his trousers rolled at the edge of the roaring sea.

Martha drives out toward the motorway system that still encircles this old city. The big trucks are out in force now; great, ponderous leviathans that grumble along the rubbled concrete of a greyness that threatens more snow. Dwarfed by their wheels, she parks her Mini at a rest stop, and stomps up to the glass and plastic counter. It's a regular old-fashioned greasy spoon. The windows are steamed, and baked beans are still on the menu, and the coffee here is moderately strong. Always a difficult dance, getting through a busy space when people's backs are turned, but she clatters her tray to give warning, and they soon share the sense of her oddity and decide not to stare. Mindblind coming through.

She likes it here. The people who do this traveling kind of work far from their communes are still surprisingly solitary by nature. A few are sharing tables and chat-

ting in low voices or quietly touching, but most sit on their own and appear to be occupied with little but their own thoughts. In places like this it's possible to soak up a companionship of loneliness that she can imagine she shares. Sometimes, one of them comes over to talk. Sometimes, but more rarely, and after all the usual over-polite questions, the conversation moves on, and some old signs of sexual availability, that to them must seem arcane as smoke signals, waft into view.

There are some rooms at the back of this place that anyone who needs them is free to use. Piled mattresses and cushions. Showers for afterward—or during. Sex with Martha Chauhan must be something lonely and oddly exotic, and perhaps a little filthy, as far as the entangled are concerned. A weird kind of masturbation with someone else in the room. There's an odd emptiness in their eyes as they and the gestalt study her when, and if, she comes. But Martha's getting older. Mindblind or not, they probably find her repulsive, and whatever urgency she once felt to be with someone in that way has gone.

She pushes aside her plate and swirls the dregs of her coffee. Blinks away the fizzing arrival of her father's reproachful smile. After all, what has she done wrong? But the empty truth is there's nothing she needs to do this afternoon. She could go back to her room in Baldwin Towers and try to sleep. She could go tobogganing, although being with other people having fun is one of the loneliest things of all. This day, the whole of whatever is left of her life, looms blank as these steamy, snow-whitened windows. She could give up. She could stop taking her tablets. Instead, though, she rummages in her carpetbag and studies the list she was given this morning, and sees that name again, Shara of the Widney Commune, and remembers the face of that striking little girl.

I first bumped into Karl Yann during one of my many afternoons of disgruntled teenage wandering. Dad, of course, was full of *You must be carefuls* and *Do watch outs*. Well, fuck that for a start, I thought as I tried without success to slam the second of the heavy sets of gates that guarded our estate. Looking back through the shockwire-topped fence at the big, neat houses with their postage stamp lawns, panic rooms, and preposterous names, it was easy to think of prisons. Then, reaching into my coat pocket, hooking the transmitter buds around my ears and turning on my seashell, my head filled with beats, smells, swirls, and other sensations, and it was easy not to think of anything at all. Hunching off along the glass and dogshit pavements past the boarded-up shops, dead lampposts, and abandoned cars, there was a knack that I'd mastered to keeping my device set so I remained aware enough to avoid walking into things. Until, that was, I found my way blocked by a large, laughing presence that was already reaching into my pocket and taking out, and then turning off, my precious seashell.

The city was supposedly full of piratical presences, at least according to my father, but this guy actually *looked* like a pirate. That, or, with his bushy red beard, twinkling blue eyes, wildly curly hair, be-ribboned coat, and pixie boots, like some counter-cultural Father Christmas.

"Give that back!"

He grinned, still cupping my seashell in a big, paint-grained palm. "This is a pretty cool device, you know. Basically, it's mimicking your brainwaves so it can mess around with your thoughts. . . ."

My father had said something similar, but this man's tone was admiring rather than concerned. At least, he seemed a man to me; I figured out later that Karl was barely into his twenties.

"I said—"

"Here. Don't want to get yourself tangled. . . ." Almost impossibly gently, he was reach-

ing to unpick the buds from around my ears, and already I was hooked. He was asking me questions. He seemed interested in my head-down city wanderings, and where I was from, and what I'd been playing on my seashell, and what I thought about things, and even in my Indian background, although I did have to make most of that up.

"This is the place. Don't snag yourself. . . ."

Now, he was holding the wire of the fence that surrounded one of those half-built developments that the dying economy had never finished. Maybe shops or offices or housing, but basically just a shrouded, rusty-scaffolded concrete frame. A few floors up, though, and in this place he called "the waystation" was a different world. In many ways, it was a glimpse of what was to come.

People stirred and said hi. The waystation's inner walls were painted, or hung with random bits of stuff, or fizzed with projections that drifted to and fro in the city haze. Old vehicles, bits of construction material, expensive drapes, blankets, and rugs that looked as if they had come from gated estate communities such as my own, had all been cleverly re-used to shape an exotic maze. Everything here had been transformed and recycled, and it was plain to me already that Karl was an artist of some talent, and at the heart of whatever was going on.

The Widney Commune is based around a grand old house, with icicled gates leaning before a winding drive. Some long-dead Midlands industrialist's idea of fine living. Shara and the other commune youngsters will still be down at the schoolhouse, and most of the adults will be out. This place could almost be deserted, Martha tells herself as she edges her Mini up the drive and clambers out. The main door lies up a half-circle of uncleared steps, with an old bellpull beside. Something tinkles deep within the house when she gives it an experimental tug.

Even with all the indignities that have been inflicted on it—the warty vents and pipings, the tumbling add-ons—this is still a fine old sort of a place to live. Especially when you compare it to Baldwin Towers. No fifteen floors to ascend. Nor any concrete stalactites, or rusting pipes, or a useless flat roof. The entangled might claim that they can see the wrongness of things, and feel disappointment and envy. But they clearly don't.

Martha starts when snow scatters on her shoulders.

"Hello there," she shouts up with all her usual yes-I-really-am-here cheeriness. "Just trying to see if there's anyone at home."

"Oh . . ." A pause as the head at the window above registers that she's not some odd garden statue. ". . . I'm sorry. The front door's been stuck for years. If you can come around to the side . . ."

This pathway's been cleared, as even a mindblind moron should have noticed, leading to a side entrance that opens into what was once, and still mostly is, a very great hall.

The space goes all the way up and there are galleries around it and a wide set of stairs. Live ivy grows up over the beams and there's a hutch in the corner where fat-eared rabbits lollop, and it's plain that the woman who's sashaying over to greet Martha is the source of at least half of Shara's good looks.

"I'm Freya. . . ." After a small hesitation, she holds out a hand. It's crusty with flour, as are her bare arms. Her shoulders are bare, too, and so are her feet. Which, like the tip of her nose, are also dusted white. She's wearing holed dungarees that show off a great deal of her lithe, slim figure. Dirty blonde hair done up in a kind of knot. ". . . you're . . . ?" Confused by the difficulties of introduction with someone of Martha's disability, she hesitates with a pout.

"Martha Chauhan." Martha lets her hand, which by now is floury as well, slip from Freya's. "I'm guessing you're Shara's birth mother?"

"That's right." Freya squints hard. "You were testing Shara? Today? At school?"

Martha nods. "Not that there's any cause for concern."

"That's good." She smiles. Hugs herself.

"But I, ah . . ." Martha looks around again, wondering if this is how social workers once felt. "Sometimes just like to call in on a few communes. Just to . . . well . . ."

"Of course," Freya nods. "I understand."

Somehow, she does, even if Martha doesn't. The entangled live in a sea of trust.

"Most people are out, either working or enjoying the day. But I've just finished baking . . . so what can I show you?"

The entangled are relentlessly proud of their communes. They'll argue and josh about who breeds the fluffiest sheep, puts on the cheeriest festival, or grows the best crop of beets. As always, there's the deep, sweet, monkeyhouse reek of massed and rarely washed humanity, but it's mingled here with different odors of yeast, and the herbs that seem to be hanging everywhere to dry, and yet more of those rabbits. Each commune has its own specialties that it uses to exchange for things it doesn't make, and this one turns out to be rabbits that are raised to make blankets and coats from their skins, as well as for their meat. This commune's bread is something they're particularly proud of, as well. Down in the hot kitchen, Freya tears some with her hands, takes a bite, then offers Martha the rest, dewy with spit. Martha doesn't have to lie when she says she isn't hungry.

Many of the rooms look like the scenes of perpetual sleepovers. The entangled mostly sleep like puppies, curling up wherever they fancy, although Freya's slightly coyer about one or two other spaces, which reek of sex. Another smell, sourer this time, comes from some leaking chairs and sofas set around a big fire where the old ones cluster, basking like lizards, tremulous hands joined and rheumy eyes gazing into the tumbled memories at a past forever gone.

"And this is where Shara sleeps with the rest of the under-tens. . . ."

Another charming, fetid mess, although this one's scattered with toys. There's a spinning top. There are rugs and papier-mâche stars. There's a one-eyed, one-armed teddy bear. A few story books and piles of paper, as well, along with newer, stranger devices that make no sense to Martha at all.

"Shara's your only birth child?"

Freya nods. She looks at least as proud of that as she does of most things, even if parenting is shared in a loose kind of way that involves the whole commune and no one gets too possessive. Knowing exactly who the father is can be difficult. In this era of trust, mothers are surprisingly coy about who they've fucked. Women often wander out to visit other communes—driven either by biological imperative or the simple curiosities of lust—and births are often followed by versions of the *he's got Uncle Eric's nose* conversations that must have gone on throughout human history.

Freya's showing drawings and scraps of writing that Shara's done, then lifting up pretty bits of clothing she's resewn herself for all the kids to use and share.

"No new babies at the moment," she adds. "Although we're planning, of course. . . . Soon as the commune has the resources. And Shara's been such a joy to us all . . . that I'm rather hoping . . ." As she puts the things back, her hands move unconsciously to her breasts.

"And Shara's father? Somehow, I'm guessing he's a fair bit older than you are. . . ?"

"Oh? That's right." Freya smiles, not remotely insulted or surprised. "Karl's hoping, as well. We all are. Would you like to see the studio where he works?"

Martha blinks, swallows, nods. A falling feeling as she follows Freya down a long corridor, then through a doorway into what's clearly an artist's studio. Rich smells of oil and varnish. Linseed oil squeezed out over a press. Pigments from the hedgerow, or wherever it is that pigments come from. Half-finished canvases lean against the

walls. The room is a kind of atrium, lit from windows on all sides and high up. The colors and the shadows roar out to her even on a day as wintry as this.

"He's probably out helping in one of the greenhouses," Freya says. "That or sketching. He tends to paint in short, intense bursts."

The canvases are part abstract and part Turner seascape. They're undeniably accomplished, and recognizably Karl Yann's, although to Martha's mind they've lost their old edge. The entangled are good at making pretty and practical things, but proper art seems to be beyond them. Still, as Martha stares at the largest blur of color, which looms over her like a tsunami in a paint factory, it's hard not to be drawn in.

Freya chuckles, standing so close that Martha can smell the grease in her hair. "I know. They're lovely, and they barter really well . . . but Karl doesn't like to have them up on display in our commune. Says all he'd ever see is where he went wrong."

I never did get my seashell back, but I got Karl Yann instead. He had a bragging mix of certainty and vulnerability that I found appealing after my father's endless *on-the-one-hand-but-on-the-other* attempts at balance. Karl was clever and he knew what he thought. Karl was an accomplished artist. Karl *cared.* He'd read stuff and done things and been to places and had opinions about everything, but he also wanted to know what my views were, and actually seemed to listen to me when I said them. Or at least, he had a roguishly charming way of cocking his head. Maybe it was a little late in the day for this whole hippy/beatnik/bohemian revolutionary shtick, but these things come new to every generation—or at least they used to—and they felt new to me. Karl used real paint when he could, or whatever else came to hand—he found the virtuals fascinating but frustrating—but what he really wanted to create was a changed world. No use accepting things as they are, Martha. No use talking about what needs to be done. At least, not unless you're prepared to act to make the necessary sacrifices to help bring about the coming wave of change. The forests dying. Whole continents starving. The climate buggered. The economy fucked. So, are you with us, Martha, or not?

They called them performance acts, and Karl and the other inhabitants of the waystation were convinced they were contributing toward bringing about a better world. And so, now, was I. People had to be shaken out of their complacency—especially the selfish, cosseted rich, with all their possessions, all their *things*—and what was the harm in having some fun while we're doing so? Right? Okay? Yes?

We used my credit pass to gain access to one of those exclusive, guarded, gated, palm tree-filled, rich-people-only, air-conditioned pleasure domes they still called shopping malls to which my father had occasionally taken me and Damien as a birthday treat, and pulled on balaclavas and yelled like heathens and flung pigshit-filled condoms at the over-privileged shoppers and their shit-filled shops, and got out laughing and high-fiving in the ensuing mayhem. We climbed fences and sneaked through gardens and around underlit pools to hang paintings upside down and spraypaint walls and mess with people's heads. Then, often as not, and young as Martha Chauhan still was, she went home to her gated estate.

The Mini seems to know the way from the Widney Commune, but time and entanglement haven't been kind to this part of the city. Martha's boots press through new white drifts to snag on the rusted shockwire and fallen sensor pylons that once supposedly protected this little enclosure. The houses, haggard with smoke, blink their shattered eyes and shrug their collapsing shoulders as if in denial. Is this really the right place? Even the right street? Martha struggles to make sense of the layout of her lost life as she stands at what was surely the heart of their neat cul-de-sac where an uprooted tree now scrawls its branches until she's suddenly looking straight at her

old home and everything's so clear it's as if her eyeballs have burned through into ancient photographic negatives. The roof of the old house still intact, even if Dad's old car has long gone from the driveway, and she almost reaches for her key when she steps up to the front door. But the thing is blocked solid by age and perhaps even the fancy triple locking that once protected it. *You can't be too careful, Martha. . . .* She looks around with a start. The other houses with their blackened Halloween eyes stare back at her. She shivers. Steps back. Takes stock. Then she walks around to the side past an upturned bin and finds that half the wall is missing, and pushes through, and everything clicks, and she's standing in their old kitchen.

Over there . . . Over *here* . . .

She's an archaeologist. She's a diver in the deepest of all possible seas. She scoops snow, dead leaves, and rubble from the hollow of the sink. She straightens a thing of rust that might once have been the spice rack. Many of the tiles with their squiggle pattern of green and white that she never consciously noticed before are still hanging. And all the while, the thinning light of this distant winter pours down and in. So many days here. So many arguments over breakfast. She can see her father clearly now, quietly spooning fruit and yogurt on his granola with the flowerpots lined on the window ledge behind him and the screen of some medical paper laid on the table and his cuffs rolled back to show his raw-looking wrists and his tie not yet done up. Damien is there as well, chomping as ever through some sugary, chocolaty stuff that he'll waste half of.

"I had a visit from some police contractors yesterday," he's telling her as he unfolds a linen handkerchief and dabs delicately at his mouth. "Apparently, they're looking for witnesses to an incident that happened at the Hall Green Mall. You may have heard about it—some kind of silly stunt? Of course, I told them the truth. I simply said you were out."

Now, as he refolds his handkerchief, his turns his guileless brown eyes up toward her, and the question he's really asking is so padded with all his usual oblique politeness that it's easily ignored. Anyway, time is moving on—Martha can feel it roaring through her bones in a winter gale—and now she's back home from her first term at the old, elite university town that her father, ever the supportive parent, has agreed to finance her to study at. Politics and Philosophy, too, and not a mention of the practical, career-based subjects she's sure he'd have much preferred her to take. Even as he pours out his granola, she can feel him carefully not mentioning this. But he seems newly hunched and his hand trembles as he spoon his yoghurt. And here's a much larger, gruffer-sounding version of Damien, as well, and sprouting some odd kind of haircut, even if he is still half-eating a bowl of sugary slop. All so very strange: the way people start changing the instant you look away from them. But that isn't at the heart of it. What lies at the core of Martha's unease is, of all things, a dog that isn't really a dog.

"*Of course* he's a dog, Martha," my father's saying as his suddenly liver-spotted hands stroke the creature's impossibly high haunches and it wags its tail and gazes at me with one eye of brown and the other of whirring silver. "Garm's *fun*. We take him for walks, don't we, Damien? The only difference is that he's even more clever and trustworthy, and helps bring us a little bit of extra safety and security in these difficult times. Some worrying things have occurred locally, Martha, and I don't just mean mere destruction in unoccupied homes. So we do what we can, don't we, Garm? Matter of fact, Martha, the enhancement technology that allows him to interact with the house security systems is essentially the same as I use to help my patients. . . ."

But this is all too much, it always was, and Martha's off out through the same stupid security gates and on along the same cold, dreary streets with more than enough stuff roaring around in her head to make up for her missing seashell that Karl nev-

er did give back to her even though all property is, basically, theft. That's dumb sloganeering and there are many new ideas Martha wants to share with him. But even the waystation seems changed. Sydney's been arrested, and Sophie got her arm burned on some stray shockwire, and different faces peer out at me through the fug. Who *is* this person? Martha Chauhan could ask them the same. Then up the final level, squeezing past a doorway into some windy higher floor that already looks like the aftermath of a battle in an art gallery, with ripped concrete walls, flailing reinforcing bars, and blasted ceilings all coated in huge swathes of color. Clearly Karl's experimenting with new techniques, and it's all rather strange and beautiful-ugly. Forget regurgitated abstract expressionism. This is what Bosch would have painted if he'd lived in the bombed-out twenty-first century city. But hadn't they agreed that art for art's sake was essentially nothing but Nero fiddling while Rome burned?

"So," he gestures, emerging from the dazzling rubble with the winter sun behind him like some rock star of old. "What do you think?"

"It's . . . incredible. . . ." So much she wants to tell him, now that she properly understand the history and context of our performance acts and see them as part of a thread that goes back through syncretic individualism, anarcho-syndicalism, and autonomism. But Karl is already scuttling off and returns holding something inside a paint-covered rag that she momentarily assumes as he unwraps it is some new artistic toy he's been playing with—a programmable paint palette or digital brush. But, hey, it's a handgun.

Snow blows in. Martha's breath plumes. It's growing dark. The old family house creaks, groans, tinkles as she shuffles into the hall and brushes away ice and dirt from the security control panel beneath the stairs. But everything here is dead—her own memory of the night when she lost half her mind and more than half her family included. Just doubts and what-ifs. Things Karl had said, questions he'd asked, about her dad being a doctor, which surely meant access to drugs and money, and about the kind of security systems employed in their gated estate, and ways to circumvent them. That, and the strange, dark, falling gleam of that handgun, and how those performance acts of old had never been *that* harmless. Not just ghastly artwork hung up the wrong way but taps left running, freezers turned off, pretty things smashed. Precious books, data, family photos, destroyed or laughingly defaced beyond all hope of recovery. Pigshit in the beds. Coy carp flopped gasping on Persian rugs. Treasured bits of people's lives gleefully ruined. In a way, she supposes, what Karl did to her here in her own home was a kind of comeuppance.

With numb fingers, she picks out the thumbnail data card that once held the house records and shoves it into her coat pocket, although she doubts if there's anything that would read it now, the world having moved on so very far. The rotten stairs twitch and groan as she climbs them. The door to poor, dead Damien's room is still closed, a shrine, just as it was and always should be, but the fall of the side wall has done for most of Dad's room, and she's standing almost in empty air as she looks in.

Amazing that this whole place hasn't been ransacked and recycled, although she's sure it soon will be. Her own room especially, the floor of which now sags with the rusty weight of the great, semi-circular slabs of polarized metal and all the rest of the once high-tech medical equipment that encircles her bed.

My father pitted all his money and energies toward healing his injured daughter in the aftermath of the terrible night of Damien's death. All I can recall of this is a slow rising of pain and confusion. Instructions to do this or that minor task—the blink of an eye, the lifting of a finger—which seemed to involve my using someone

else's body. My thoughts, as well, seemed strange and clumsy to me as the crystal neurons strove to blend with the damaged remains of my brain and I dipped in and out of rejection fever. In many ways, they didn't seem like my thoughts at all. I wasn't *me* any longer.

Sitting watching bad things happen on a screen with my baby brother crying. Or being on a beach somewhere with crashing waves and the dogs, the Frisbees, the cricket. These were things I could understand and believe in. But the uncooperative limbs and wayward thoughts of this changed, alien self belonged to someone else. A roaring disconnect lay between the person I'd been and the person I now was, and the only way I could remain something like sane was to think of this new creature as "Martha Chauhan."

"I'm so grateful you're still here and alive," a tired, grey-haired man Martha knew to be her father was saying as he spoon-fed her. "Is there much . . ." The offered spoon trembled in age-mottled fingers. ". . . you can remember of how all this happened?"

Martha made the slow effort to shake her head, then to open her mouth and swallow.

"There was a break-in, you see, here at our house. I don't know how the person got in, nor why the systems didn't go off, or why poor Garm wasn't alerted. But he wasn't. Neither was I—I'm too old, too deaf—and I think it was your brother Damien who must have heard something, perhaps the glass of the back door being broken, and got you to go downstairs with him. And then I believe the intruder must have panicked. After all, it can't be easy, to be standing alone in the dark of someone else's kitchen. A gun going off—that was what woke *me*, and by the time I got downstairs the intruder had fled and poor Damien was past any kind of help, although at least I know he didn't suffer. And poor Garm, of course, proved to be no use at all, and I had him reformatted and sold. But then, you never did like him much, did you? I thought you were lost to me as well for a while, Martha, what with the damage that bullet had inflicted to your head. But you're here and alive and so am I and for that I'm incredibly, impossibly grateful. . . . We've spilled a bit there, though, haven't we? Hold on, I'll get a cloth. . . ."

Eventually, Martha learned how to sit up unaided, and to spoon, chew, and swallow her own food. It was a slow process. Through several sleepless years, as her father grew withered and exhausted from wiping her arse and changing the sheets and tending the machines, she learned how to walk and talk and returned to some kind of living. He never left her. He never let go. He never relented. He was a sunken smile and tired eyes. He was the stooped back that lifted her and hands that were always willing to hold. He never spared the time or energy for any feelings of rage, or such abstract concepts as retribution, although he surely knew who was responsible for the destruction of his family, and had sufficient evidence to prove it, even in days when justice was about as reliable as the power grid and the police were privatized crooks. Karl Yann slunk off toward the sunrise of this bright new world, whilst Martha Chauhan's father's heart gave out from grief and exhaustion, and she was left empty, damaged, and alone.

She rams the old car into gear and thumbs on the headlights. The tires slide. The black-edged, glittering night pours past her. She can hear laughter over the roaring in her ears as she parks and kills the Mini's engine at the far edge of some trees outside the Widney Commune. She rummages deep in her carpetbag, picks off the fluff and dry-swallows the few immune suppressants she can find loose in the lining. Not enough, but it will have to do. Then she takes out a primed antipsychotic syringe and shoves it into her coat pocket.

Her feet are dead and the house's fire-rimmed shadow leaps over a field of untrampled snow as she crunches toward it. There's no one about apart from pigs sleeping in their pens until she turns a corner and hits a blaze of bonfire. Then

there's life everywhere, and dancing to the accompaniment of discordant shouts and bursts of clapping.

Amazing, how well this useless brain of hers still works. How it can devise and dismiss plans without her even realizing she's thought of them. The paintings inside the house, for example. She could walk in and slash, burn, or deface them. But that wouldn't hurt Karl Yann. At least, not enough. He'd just pronounce it a fresh phase. Even burning this whole commune to the ground wouldn't be sufficient. What about that child, then, Shara—who Martha can see twirling at the shimmering edge of the flames? Or the lovely Freya? He'd feel *their* loss, now, wouldn't he? But Martha's mind slides from such schemes, not so much because she finds them abhorrent, but because they lack the brutal simplicity she craves. It has to be *him,* she tells herself as she stands ignored at the edge of the light searching the shining, happy faces. Has to be Karl Yann. Draw him away to some quiet spot—he might recognize her, but the entangled are impossibly trusting—then knock him senseless with the contents of this syringe. Drag him to the Mini, drive him to some as-yet undefined place . . . In this world where no one steals and no one hurts and everything is shared, all these things will be ridiculously easy.

The straps of the field cap can be easily adjusted. Its settings are incredibly flexible. You could kill someone, fry their brains, if you really wanted. That, or turn them into a gibbering vegetable. Appealing though these options are, though, to Martha's mind they lack the simplicity of true retribution. So why not destroy just enough of his thalamus to break the quantum shimmer of entanglement? Then he'd be alone, just as she is. He'd be lost, and he'd know what it really is to suffer. The final performance act in a world made perfect.

But where *is* he?

"Hey, hey—look who it is! It's Martha!"

A familiar male voice, but it's Tommy the teacher who comes up to embrace her. Perhaps this is his commune. Perhaps he's out on the look out for new friends to dance, laugh, or fuck with. The entangled are like bonobo monkeys. Smell like them, as well. Others are turning now that Tommy's noticed her, mouths wide with surprise and sympathy. Poor, dear Martha. Sweet, old Martha. Standing there at the cold edge of the dark, when all of us are so very warm and happy. You don't need to be entangled to know what they're feeling.

She's swept up. She's carried forward. She lets go of the syringe in time just as her hands are hauled from their pockets. The entangled don't do booze, or other drugs—most of them frown at Martha's liking for coffee—but the stuff that steams in the cracked mug that's forced into her fingers is so sweet and hot it must be laced with something. Then there's the rabbit: tender, honey-savory—a treat in itself, meat being something that's reserved for special occasions. They're so happy to see her here at the Widney Commune it's as if they've long been waiting for her, and their joy spills out in hugs, giggles, and touches. The kids flicker like elves. The old ones grin toothlessly.

Come on, Martha! Now, they're clapping to some offbeat tune she can't quite follow. A circle forms, and she's at the heart of it where the snow's been cleared and the fire roars. *Come on, Martha! Come on, Martha!* They think they're not taunting her. Think they're not drunk. But they're drunk on this hour. Drunk on the future. Drunk on everything.

Martha does an ungracious bow. Stumbles a few Rumplestiltskin steps. She's the ghost of every lost Christmas. She's the spirit of the plague from that story by Poe. And everything, her head most likely, or possibly her body, or this entire world, is spinning. Poor Martha. Dear Martha. They stroke the lumpen shape of her skull like it's an old stone found on a beach. And this isn't even her commune. Isn't her world.

"Hey, Martha . . ." Now, Freya and Shara emerge from the glowing smoke. "So great that you've come back to see us again!"

"Oh, yes . . ." Shara agrees. "We all love you here, Martha. We really do."

"Where's Karl?" Martha yells over a roaring that must be mostly in her head.

"He's . . ." One starts.

". . . out." The other finishes.

"Right," Martha says. "You don't have any idea *where,* do you? I mean . . . you see . . ."

She trails off as these two elfin creatures, one small and one fully grown and both entirely beautiful, gaze at her with firelight in their eyes.

"Oh, somewhere," Freya says with a faraway smile. "Your birthfather likes to wander, doesn't he, Sha?"

For Martha's benefit, Shara gives an emphatic nod.

"Oh? Right. Good . . . you see, I think I used to know him. . . . Long ago."

"Oh, but you *did!*" Freya delightedly confirms. "I said you'd come to see us, and Karl instantly knew who you were, didn't he, Sha? Said you went back a very long way."

"And then . . . he went out again?"

"Of course. I mean . . ." Freya shrugs her shoulders. Gazes off, as if nothing could be more welcoming, into the freezing dark. "Why not?"

After her father died—a feat he managed with the same quiet fortitude with which he'd done most things throughout his life—Martha Chauhan found herself living in a place with Harry Potterish turrets and pointed windows that could have been the one she and Damien had visited when they were kids. A kind of commune, if you like. But not.

Still a youngish woman by many standards, but she fit in well with these wizened and damaged creatures who cost so much money and technology and wasted effort to keep alive. She learned how to talk to them, and show an interest. She got better at walking. She learned how to play mahjong. And outside, beyond the newly heightened shockwire and the sullen guards, the world was falling apart. The tap water was brown with sewerage. The winters were awful. The summers were shot.

But wait. The big screens they sat in front of all day were showing something else. There was a virus—a new mutation of a type of encephalitis that attacked a part of the brain known as the thalamus. The fever it triggered was worrying, but very few people died from it, and those who survived were changed in ways they found hard to explain—at least to those who hadn't yet become whatever they now were. Some said the virus wasn't just some random mutation, but it was down to terrorists, or space aliens, or the government. Or that it was triggering something that had long been there, buried deep inside everyone's skulls, and that this was a new kind of humanity, a different kind of knowing, which was triggered by a form of quantum entanglement that joined mind to mind, soul to soul.

Others simply insisted that it was the Rapture. Or the end of the world.

Of course, there were riots and pogroms. There was looting. There were several wars. Politicians looked for personal advancement. Priests and mullahs pleaded for calm, or raged for vengeance. People walked the streets wearing facemasks, or climbed into their panic rooms, or headed for hilltops and deserted islands with years' supplies of food and weapons. A time of immense confusion, and all Martha Chauhan knew as things collapsed was that the few staff who were still working at Hogwarts laughed as they saw to the catheters or mopped the floors. Soon, many of the wizened and damaged ones were laughing as well.

The day the shockwire fell—her own personal Berlin Wall—Martha Chauhan stumbled out into a changed world. It was all almost as she'd long expected. There were the bodies and the twisted lampposts and the ransacked buildings and the

burnt-out cars. But people were busy working in loose, purposeful gangs, and *clearing things up.* Stranger still, they were singing as they did so, or laughing like loons, or simply staring at each other and the world as if they'd never seen it before.

On she stumbled. And was picked up, cradled, fed, welcomed. Then, as the fever passed by her and nothing changed, she was pitied as well. Eventually, she got to meet people who could explain why she could never become entangled, but she already knew. There was nothing that could be done to replace the dumb nano-circuitry that took up vital parts of her skull without destroying this construct known as Martha Chauhan as well. Still, the commune at Baldwin Towers was happy to have her. She was even given a specialist kind of work, along with some privileges, to reflect her odd status and disability, a bit like the blind piano tuners of old. And so it went, and so it still is to this dark winter's night, and now Martha Chanhan's back in her Mini, driving lost and alone through a fathomless, glittering world.

She's stopped. The little car's engine is quiet, and the cold's incredibly intense. She fumbles in her carpetbag with dead fingers, but whatever immune suppressants she has left—carefully made somewhere far from here at great but unmentioned expense—must all be back at Baldwin Towers, and the roaring in her head deepens as she breaks the door's seal of ice and tumbles outside.

Another day is graying as she looks up at the waystation. Superficially, nothing much has changed. It's still an abandoned ruin, although the snow and these extra years of neglect have given it a kind of grace. Even the dead shockwire Karl once held up for her remains, and shivers like a live thing, scattering rust and ice down her neck as she crawls beneath.

All the old faces seem to peer out at her as she clambers on and in through concrete shadows and icicle drips. Who *is* this person? She could ask the same of them. Not that she ever belonged here. Or anywhere. Creaks and slides as she climbs ladders and crawls stairways until she claws back her breath and finds she's standing surprisingly high, overlooking a greened and snowy landscape that seems more forest than city in the sun's gaining blaze. For all she knows, the entangled will soon be swinging tree to tree. But that isn't how it will end. They're biding their time for now, still clearing things up as this damaged world heals, and the icecaps, the forests, the jungles, the savannahs, return. But the gestalt will spread. Soon, it will expand in a great wave to join with the other intelligences that knit this Universe. Martha Chauhan hears someone laughing, and realizes it's herself. For a dizzy moment there, standing at this precipice at the future's edge, she almost understood what it all means.

The whole sky is brightening, and she's starting to realize just how beautiful this high part of the old waystation has become. Blasted rubble and concrete and a sense of abandonment, certainly, but everything covered in the glimmer of frost and snow and old paint and new growth. Colors pool in the icemelt. Then, something bigger moves, and she sees that it's a ragged old man, a kind of grey-bearded wizard, half Scrooge and half Father Christmas, who seems part of this grotto in his paint-strewn clothes.

"It's me, Martha," Karl Yann says in a croaked approximation of his old voice as his reflections ripple about him. "I just wish I could share how you feel."

"But you *can't*, can you? You're here and I'm not." Martha Chauhan shakes her head. Feels her thoughts rattle. That isn't what she meant at all. "You think you know everything, don't you? All the secrets of the fucking Universe. But you don't know what it is to *hurt.*"

He winces. Looks almost afraid. But there's the same distant pity in his old eyes that Martha's seen a million times. Even here. Even from him. She tries to imagine herself dragging the syringe from her pocket. Running forward, screaming and stabbing. Instead, her vision blurs with tears.

"Oh, Martha, *Martha* . . . Here, look . . ." Now he's coming toward her in a frost of breath, and holding something out. "This used to be yours. It *is* yours. You should have it back. . . ."

She sniffs and looks despite herself. Sees her long-lost seashell, of all things, nestling in his craggy hand. She grabs it greedily and hugs it to herself and away from him. "I suppose you've got that other thing here as well—another bloody souvenir?"

He almost looks puzzled. "What thing?"

"The gun, you bastard! The thing you killed my brother with—and did this to me!" She slaps the slope of her skull so hard it rings.

But he just stands there. Then, slowly, he blinks. "I think I see."

"See what?" The entangled are useless at arguing—she's tried it often enough.

"You think, Martha, you *believe,* that I broke into your house and did that terrible thing? Is that what you're saying?"

"Of course I am." But why is the roaring getting louder in her head?

"I'm sorry, Martha," he says, looking at her more pityingly than ever. "I really am so very, very sorry."

"You can't just . . . leave. . . ."

But he is. He's turning, shuffling away from her across this rainbow space with nothing but a slow backward glance. Dissolving into the frost and the shadows, climbing down and out from this lost place of memories toward his life and his commune and a sense of infinite belonging, before Martha Chauhan even knows what else to know or say or feel.

It's full day now, and Martha Chauhan's sitting high at the concrete edge of the waystation.

It's freezing up here, despite the snowmelt. But she doesn't seem to be shivering any longer, nor does she feel especially cold. She sniffs, swipes her dripping nose, then studies the back of an old woman's hand that seems to have come away coated in blood. That roaring in her ears that is far too loud and close to be any kind of sound. Although there's no pain, it isn't hard for her to imagine, with what brains she has left, the wet dissolution of the inside of her skull as the immune suppressants fade from her blood. If she doesn't turn up at Baldwin Towers soon, she supposes help will probably come. But the entangled can be astonishingly callous. After all, they let their old and frail die from curable diseases. They kill their treasured pets for clothing and food.

She inspects her old seashell. A small glow rises through the red smears when she touches its controls. Something here that isn't dead, and she hooks the buds around her ears and feels a faint, nostalgic fizz. But the stuff she liked back in the day would surely be awful, old, and lost as she now is. A different person, really. In fact, that's the whole point. . . .

She feels past the syringe in her coat pocket, finds the data card she took from the house security system and sniffs back more blood as she numbly shoves it in. It's still a surprise, though, to find options and menus hanging against the clear morning sky. Files as well, when you'd have thought Dad would have deleted them. But then, he never liked destroying things—even stuff he never planned to use. And perhaps, the thought trickles down through her leaking brain, he left this for her. After all, and despite his many evasions and protestations, he always had a strong regard for the truth.

She waves a once-practiced hand through ancient images until she reaches the very last date. The end of everything. The very last night.

And there it is.

There it always was.

She's looking into the bright dark of their old kitchen through the nightsight eyes of that stupid not-dog. Fast-forward until a window shatters in a hard spray and the

door opens and something moves in, and the not-dog stirs, wags its tail, recognizes . . . not Karl Yann, but a much more familiar shape and scent.

Martha rips the buds from her ears, but she still can't escape the past. She's back at this waystation, but she's young again, and the colors are brilliant, and she's here with Karl Yann, full of Politics and Philosophy and righteous anger at the state of the world. And he's got this handgun that he's merely using as a prop for all his agitprop posturings, when she has a much clearer, simpler, cleverer idea. The final performance act, right? The easiest, most obvious one of all. . . . Come on, Karl, don't say you haven't *thought* of it. . . . And fuck you if you're not interested. If you're not prepared, I'll just do the damn thing myself. . . .

Martha flouncing out from the waystation. Into the darkness. Hunching alone through the glass and rubble streets. The gun a weight of potentiality in her pocket and the whole world asleep. She feels like she's in the mainstream of the long history of resistance. She's Ulrike Meinhof. She's Gavrilo Princip. She's Harry Potter fighting Voldemort. A pure, simple, righteous deed to show everyone—and her dad especially—that there are no barriers that will keep the truth of what's really happening away from these prim, grim estates. Not this shockwire. Nor these gates. Not anything. Least of all the glass of their kitchen door that breaks in a satisfying clatter as she feels in for the old-fashioned handle and turns. Not that this isn't a prank as well. Not that there isn't still fun to be had. After all, that fucking thing of a dog isn't really living anyway, it's nothing but dumb *property,* so what harm is being done if she shoots it properly dead? Nothing at all, right? She's doing nothing but good. She's shoving it to the system. She's giving it to the man. The darkness seethes as she enters, and she feels as she always feels, standing right here in her own kitchen, which is like an intruder in her own life.

That roaring again. Now stronger than ever, even though the seashell's buds are off and its batteries have gone. After all, how is she to tell one shape from another in this sudden dark? How could she know when she can barely see anything that the thing that comes stumbling threateningly out at her is Damien and not that zombie dog? It's all happened already, and too quickly, and the moment is long gone. A squeezed trigger and the world shudders and she's screaming and the dog's howling and all the backup lights have flared and Damien's sprawled in a lake of blood and the gun's a deathly weight in her hand—although Martha Chauhan doubts if she could ever understand how she felt as she turned it around so that its black snout was pointing at her own head and squeezed the trigger again.

Her father's with her now. Even without looking, and just as when she lay in her bedroom surrounded by pain and humming equipment, she knows he's here. After all, and despite her many attempts to reject him, he never really went away. And, as always, he's telling her tales—filling the roaring air with endless ideas, suppositions, stories . . . Talking at least as much about once-upon-a-times and should-have-beens as about how things really are. Using what life and energy he has left to bring back his daughter. And if he could have found a way of sheltering her from what really happened that terrible night, if he could have invented a story that gave her a reason to carry on living, Martha knows he would have done so.

She sniffs, tastes bitter salt, and feels a deep roaring. It's getting impossibly late. Already the sun seems to be setting, and the beach is growing cold, and the cricket match has finished, and that last gritty samosa she's just eaten was foul, and all the dogs and the kite flyers have gone home. But there's Dad, walking trousers-rolled and hand-in-hand with Damien as the tide floods in. Martha waves cheerily, and they wave back. She thinks she might just join them, down there at the edge of everything where all islands meet. ❍

ON BOOKS

Peter Heck

SHADOWS OF THE NEW SUN
Stories in Honor of Gene Wolfe
Edited by J.E. Mooney & Bill Fawcett
Tor, $25.99 (hc)
ISBN: 978-0-7653-3458-9

Gene Wolfe, chosen this year as Grand Master by the Science Fiction and Fantasy Writers of America, is one of the writers—fortunately, there are now a fair number—we can point to in refutation of those who still sneer at the genre as "subliterary junk." A good indication of how widely he is admired by his fellow professionals is this collection of Wolfe tributes, which includes some of the most admired writers currently working in the field—plus a couple by Wolfe himself, for good measure. Also, each of the authors contributes a brief description of how they know Wolfe, who has been a frequent and congenial presence on the science fictional social circuits over the years. Editor Mooney begins that sequence with a story about how Wolfe called him out of the audience to join a convention panel for aspiring writers—despite never having met him.

The contributors make the anthology's theme more interesting by including allusions to and echoes of Wolfe's own stories. For example, one of the authors—no, I won't tell you which one—brings together a group of Wolfe's protagonists, all from different stories, leaving the reader to figure out who they are. For another example, Joe Haldeman and Nancy Kress both base their stories' titles on "The Island of Dr. Death and Other Stories," one of Wolfe's iconic tales—a title on which he himself has played several variations.

Other authors here emulate Wolfe's narrative approach, in which not even the most basic "facts" of the story can be taken at face value. Still others adopt material reminiscent of one or another of his tales. And many of them also make punning references to the author's name, or to Rosemary, his wife. The more a reader knows about Wolfe's writing, the more this kind of fun will be obvious.

But even if you're not intimately familiar with his work, the stories here are likely to pique your interest—especially the two by Gene himself, "Frostfree" and "Sea of Memory." The first takes a completely ordinary household item and turns it into an alarming character in a story that combines comedy and an edge of terror. The second plays variations on one of Wolfe's most haunting themes, the nature of memory—a theme several of the other authors incorporate in their works.

The contributors, just to pick some of the more familiar, include Neil Gaiman, Timothy Zahn, David Drake, Jack Dann, Michael Swanwick, Todd McCaffrey, David Brin, and Jody Lynn Nye. All were evidently inspired by the project—no doubt spurred to their best by the knowledge that Wolfe was contributing two stories of his own.

A fine testimonial to the importance of Wolfe, and to his impact on writers of all ages and schools. Readers who like this one should follow it up with a look at some of Wolfe's own work, some of the best writing in our genre over the last several decades.

THE GUIDING NOSE OF ULFÄNT BANDERŌZ
By Dan Simmons
Subterranean Press, $35.00 (hc)
ISBN: 978-1-59606-541-3

Simmons, one of the more respected authors of his generation, tips his hat to one of his significant influences in this homage to Jack Vance's "Dying Earth" series. Illustrated in appropriately witty

style by Tom Kidd, it's a fitting entry in Subterranean's catalog, which includes a number of Vance reissues and tributes.

Set in the final days of the planet's life, when the waning sun appears ready to give up the ghost at last, the book follows the adventures of Shrue the diabolist, one of the many magicians who are the ruling class of the era. Shrue learns of the death of a major wizard, the Ulfânt Banderōz of the title. Banderōz, who lived in a strongly guarded isolated palace, is rumored to have collected some of the most potent spells to hold off the impending extinction of the sun. Unsurprisingly, Shrue—and, equally unsurprisingly, several others—decide to avail themselves of the contents of Banderōz's Ultimate Library and Final Compendium of Thaumaturgical Lore.

Shrue quickly learns that he has one especially fierce rival in the quest for Banderōz's stash of lore and spells: Faucelme, a magician whose obscurity has hidden what turn out to be extraordinary resources. At the same time, Shrue finds himself in the company of an old acquaintance, Derwe Coreme—a legendary warrior woman whose career began when she was kidnapped by Cugel the Clever in *The Eyes of the Overworld*, one of Vance's original "Dying Earth" sagas. Shrue and Derwe strike up an informal alliance, giving him the protection of her group of Amazons.

Simmons builds the contest between Shrue and Faucelme with all the twists and ironic reversals one would expect in a novel inspired by Vance. At the same time, he does a very credible job of capturing the style and tone of the "Dying Earth" series, which many readers would consider the primary charms of that body of work—and that should not be taken as slighting in any way the inventiveness of the plot or characters. Also, as is often true in Vance's own work, readers looking for a nice moral distinction between "good guys" and "bad guys" may find that Shrue and his companions are not so easily sorted out—although most readers will have little trouble in deciding with whom to sympathize.

There are lots of little touches to like in this story. Simmons pays a particularly nice homage to Vance in a scene late in the book where Shrue and his various traveling companions—who by this point are an extremely heterogeneous lot—enjoy a formal dance, with a variety of music. Vance is one of the very few authors in whose work music is portrayed in a way that actual musicians find convincing.

Strongly recommended.

EARTH THIRST
By Mark Teppo
Night Shade Books $15.99 (tp)
ISBN: 978-1-59780-445-5

There's a segment of the genre readership that reacts to vampire novels as if they somehow degrade the entire enterprise of fiction. Well, I may not be the biggest fan of the subgenre, but really, guys, it doesn't all suck. (Rimshot.)

Teppo gives us a hard-edged protagonist, Silas, whom we meet as a member of what seems to be a commando team aboard a ship in the South Pacific. We also meet Mere, a journalist who is following him—what for, we don't know at first. The ship's mission, it emerges, is to prevent a Japanese ship from hunting whales; those aboard will interpose themselves between the ship and its prey. But Silas's group is onboard for a purpose of its own—one having to do with the motives they suspect are behind the whaling expedition.

Things rapidly go haywire, as the Japanese whaler turns out to be a decoy for some far more sinister purpose, cutting loose with unexpectedly heavy weaponry as Silas and his teammates approach them in small boats. Silas is left to find his way to land—and the others appear to have been killed. By an apparently superhuman effort, he makes it to Australia—and in the process, it becomes amply clear that he is not human, after all. He is, for all intents and purposes, what we think of as a vampire. More than that, so are all the members of his team—and a good number of others.

There the story picks up momentum, as he learns that the other passengers of the ship he was on have come to the same

port—and that they're being kept in a remote hospital. He builds up a new identity, drawing on a network of those like him, and goes to the hospital to free Mere—the one person he trusts to help him find out what is really going on. From that point, he's a hunted man—but at the same time, he's on a hunt of his own. He's picked up a clue as to who's behind the whaling operation, which he is fairly certain was a trap meant to catch him and his fellow vampires.

Taking a plane out of Australia, his first stop is Easter Island—with Mere tagging along. There they find a secret laboratory, which leads them to the next leg of the journey—South America, where they encounter the real enemy. Teppo keeps the reader in page-turning suspense. But the interesting part is his extrapolation of the consequences of an established society of vampires.

At the same time, the story takes on a dimension of commentary on the impact of industrialization on the planetary ecology. The mission to stop the whaling expedition is just the start of a theme of preserving Mother Nature. Teppo works in the primal theme of vampires "sleeping" in their graves to restore themselves with a theme of their ancient connection to the environment: a spin-off of the Gaia trope, in one sense. There's a contrast of urban landscapes and unspoiled natural settings—and natural settings manipulated for the purposes of the megacorporation that turns out to be the main adversary to Silas's drive for survival for himself and those like him.

A provocative new take on one of the longest-running themes in the genre. Teppo looks to be a writer to pay attention to.

THE DARWIN ELEVATOR
By Jason M. Hough
Del Rey, $9.99 (mm)
ISBN: 978-0-345-53712-6

Hough makes his SF debut with a big, ambitious novel of alien contact in a post-apocalyptic world. At a first approximation, it lies somewhere between Arthur C. Clarke's Rama books and the Mad Max movies. And it's the first of a trilogy.

The protagonist is Skyler Luiken, who scavenges useful items—often on a custom order basis—from the ruined world outside Darwin, Australia. It's a tough job, primarily because the ruined world is inhabited by former humans, victims of a disease that turns them into vicious predators who turn against any normal human who falls into their midst. Worse yet, the disease is extremely contagious, and an unprotected human venturing outside the one known safe zone—the area around Darwin, Australia—will quickly contract it and join the ranks of the "subs," as they are called.

Luiken has an edge, though—he's immune to the disease. Better yet, he's recruited a crew of other immunes. so he can travel lighter and operate with fewer restraints than the competition. But his way of making a living, dangerous as it is, is about to get caught in complications beyond his control.

We learn that the city of Darwin is not only safe from the plague, but the site of a space elevator built by aliens who delivered the automatic hardware by robot ship, letting it set itself up without any direct communication with humans. The elevator connects with an elaborate structure of habitats far above Earth's surface, where scientists and researchers live—getting their supplies from Darwin. And the rulers of Darwin, thanks to their location on the interface between the ground and space, have a unique position of power. In fact, as the novel opens, several of those rulers are about to move to increase their power. The ensuing struggle turns nasty quickly, and of course Luiken, whose skills are useful to all parties, is quickly caught up in it.

Meanwhile, Dr. Tania Sharma, one of the scientists employed on the elevator, is working on a project for her superior, Neil Platz, who was among the first humans to explore the potential of the elevator—and who became incredibly rich as a result. Tania, the daughter of one of Platz's original colleagues, is fascinated by the data Platz has fed her, but frus-

trated by the slow pace at which she is being allowed to proceed with her investigations. She hooks up with Luiken when it becomes necessary to retrieve some scientific data in a Japanese astronomical observatory. The visit there turns into a nightmare as a large group of subs attacks. That is also the first clear evidence that something has changed the status quo; the subs are more aggressive and more organized that anyone has seen before, and the party does not manage to escape without losses. Even worse, the safe zone around Darwin no longer seems impenetrable to the plague or its victims. Something serious is changing—and the survival of what's left of human civilization may depend on figuring it out before things deteriorate to the point of no return.

In the process, we get to see life on the various levels of the space elevator, portrayed in convincing detail. Hough has thought through the way his "upstairs," scientifically oriented, society is organized, just as he has worked through many of the details of the more chaotic ground-based society in which Luiken operates. When the characters from the one begin to move into the other, the results are especially interesting, both on the plot level and in what they reveal about the world and its characters.

Hough builds plot twist upon twist as the story progresses, and introduces several strong characters even as the body count among those we've already met increases. This is the first of a trilogy, "The Dire Earth Cycle," being issued in three consecutive months by the publisher. Fans of hard-edged adventure SF with a good scientific foundation will find this one very much their meat. If you're among that group, you'll be glad to know there's no waiting (well, next to none) for the sequels.

TIME TRAVEL:
A Writer's Guide to the Real Science of Plausible Time Travel
By Paul J. Nahin
Johns Hopkins Press, $24.95
ISBN: 978-1-4214-0082-2

Time travel is impossible. Or maybe it's just very hard. Just maybe, there's some wrinkle in relativity or string theory or someplace that allows you to do it.

Depending on which side of this proposition you take your stand, time travel is either plausible science fiction or outright fantasy, full of entertaining paradoxes and twists of logic, but fantasy nonetheless.

Fortunately for those who have a time travel plan they want to turn into hard SF, Paul Nahin has come along with just the right cookbook for the time travel author. A prolific writer on scientific topics, with a definite emphasis on mathematics and physics, Nahin is just the guy to make sure you aren't talking complete nonsense when you start to explain how your protagonist got back to the Roaring Twenties to kill his grandfather.

Nahin explains in an introduction that time travel, once dismissed by real physicists, is now considerably more respectable. The likes of Kip Thorne, Richard Gott, and Frank Tipler have all pointed out ways it might be achieved without violating the established principles of physics. Even Stephen Hawking, who is somewhat less optimistic about the chance of anyone actually traveling in time, admits that his objections are a matter of "gut feeling" rather than solid extrapolation from first principles.

Nahin also shows a considerable familiarity with how the theme has been handled in SF, beginning with H.G. Wells, who in his opinion "got almost everything right." Wells' key breakthrough, sending his protagonist through time by means of a machine rather than some freak accident (or getting to the future through a long "sleep"), made the theme of time travel a solid science fictional one, rather than a subset of fantasy. Nahin also looks at how time travel was handled in the magazine stories of the Golden Age, showing considerable familiarity with obscure pulp stories. He heaps particular scorn on the use of accident (such as the famous "bump on the head" that sent Mark Twain's protagonist into the past

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in *A Connecticut Yankee in King Arthur's Court*) as a means to move through the time dimension.

But the real business of the book is to look at real physical mechanisms by which time travel could be done. Unfortunately, some of the best-founded ideas appear to require conditions so extreme as to make the backyard time machine a non-starter.

But fear not; Nahin has plenty of ammunition for the would-be fictional time machine builder. For example, if faster-than-light travel turns out to be possible, time travel into the past is theoretically possible, as well. And that's the really interesting case, for most of us; we're all going to get to see the future, or a small portion of it, without any special effort. Getting back to an earlier day—so we can save ourselves from some regrettable mistake, or prevent some disaster, or even just to hear Bach playing his own music—is the real dream.

The book, an update of a 1997 publication, is full of interesting looks into the odd crannies of physics, and implications of the big ideas, as well. And while you almost certainly won't be able to build your own time machine when you finish, if you've been thinking about how to make one work in a work of fiction—or if you'd like to understand better how some of your favorite stories do so—this one's a well-written, fan-friendly and thoroughly researched look at the subject. ❍

SF CONVENTIONAL CALENDAR

So many good cons, so little space for recommendations: try FenCon, ConStellation, Archon, Vcon, CapClave (where I'll be), MileHiCon, ConTraFlow, ConJecture, NecronomiCon, and ValleyCon. Whew! Got 'em all in. Plan now for social weekends with your favorite SF authors, editors, artists, and fellow fans. For an explanation of our con(vention)s, a sample of SF folksongs, and info on fanzines and clubs, send me an SASE (self-addressed, stamped $10 [business] envelope) at 10 Hill #22-L, Newark NJ 07102. The hot line is (973) 242-5999. If a machine answers (with a list of the week's cons), leave a message and I'll call back on my nickel. When writing cons, send an SASE. For free listings, tell me of your con five months out. Look for me at cons behind the Filthy Pierre badge, playing a musical keyboard. —Erwin S. Strauss

OCTOBER 2013

4—**FenCon**. For info, write: **Box 701448, Dallas TX 75370.** Or phone: **(973)-242-5999** (10 am to 10 pm, not collect.) **(Web) fencon.org. (E-mail) info@fencon.org.** Con will be held in: Addison TX (if city is omitted, same as in address) at the Crowne Plaza North Dallas. Guests will include: Cory Doctorow, Larry Niven, John Ringo, the Nielsen-Haydens, Amber Benson, Geoffrey A. Landis.

4-6—**ConStellation. (256) 270-0092. con-stellation.org.** Huntsville AL. A general SF, fantasy and horror convention.

4-6—**Archon. archonstl.org.** Gateway Center, Collinsville IL. David Weber, Vic Milan, Donato Giancola, Lee Martindale, Jan Dimasi.

4-6—**VCon. vcon.ca.** Vancouver BC. Dan Wells, John Kovalac, Mur Lafferty, Thryza Segal. "Pirates and Piracy: Sea, Space and Web."

4-6—**Can-Con. can-con.org**. Minto Suite Hotel, Ottawa ON. Robert J. Sawyer, Hayden Trenholm, Peter Watson. Canadian SF/fantasy.

4-6—**Browncoat Ball. browncoatball.com.** Phoenix AZ. For fans of the *Firefly* and *Serenity* series.

11-13—**CapClave. capclave.org.** Hilton, Gaithersburg MD. George R.R. Martin, editor Sharyn November, artist Steve Stiles.

11-13—**Sirens. sirensconference.org.** Potland OR. "Women in Fantasy Literature."

12-13—**TsubsaCon. tsubasacon.com.** Riverfront Ballroom and Convention Center, Huntington WV. Anime.

12-13—**Ireland National Con. octocon.com.** Dublin Ireland. Richard K. Morgan, Gail Simone, Michael Carroll, Maura McHugh.

18-20—**MileHiCon, Box 487, Westminster CO 80036. milehicon.org.** Denver CO. S. McGuire, C. M. Valente, Aaron Miller, I. Tregillis

18-20—**ConTraflow, Box 57927, New Orleans LA 70157. contraflowscifi.org.** Doubletree, Kenner LA., Eric Flint, John Picacio.

18-20—**ConJecture, Box 927388, San Diego CA 92192. 2013.conjecture.org.** Combined with the ConChord SF-folksinging con.

18-20—**NecronomiCon, c/o 5902 Thontosassa Rd., Plant City FL 33565. stonehill.org.** Embassy Suites, U. of So. FL., Tampa FL.

18-20—**ValleyCon, Box 7202, Fargo ND 58106. valleycon.com.** Best Western Doublewood, Fargo ND. Chase Masternon.

18-20—**Arcana, Box 8036, Minneapolis MN 55408. arcanacon.com.** Best Western Bandana Sq., St. Paul, MN. Dark fantasy & horror.

18-20—**Another Anime Con, Box 692, Nashua NH 03064. anotheranimecon.com.** Manchester NH. It's, well, another anime con.

18-20—**Anime Banzai. animebanzai.org.** Salt Lake City, UT. Now guess what *this* one is all about.

18-20—**RingCon. ringcon.de.** Augsburg, Germany. For fans of *Lord of the Rings*, and the work of J. R. R. Tolkien generally.

19-20—**FACTS. facts.be.** Flanders Expo Centre, Ghent Belgium. Mario Alberti, Erik Larsen. Comics, SF, anime.

25-27—**Ohio Valley Filk Fest. ovff.org.** Doubletree, Worthington (Columbus) Ohio. S. J. Tucker, Betsy Tinney. SF/Fantasy folksinging.

25-27—**FurFright. furfright.org.** Cromwell Ct. Halloween party for fans of anthropomorphics (furries).

25-27—**SlagaCon. slagacon.com**. Indianapolis IN. Buster Jones (voice of Blaster). For fans of the *Transformers*.

25-27—**AkiCon. akicon.org.** SeaTac Doubletree, Seatle WA. Monica Rial, Johnny Yong Bosch.

25-27—**SNAFUCon. snafucon.com.** Grand Sierra Resort & Casino, Reno NV. Anime.

25-27—**Cruise Trek, 23852 Pacific Coast Hwy. #384, Malibu CA 90265. cruisetrek.com.** River cruise, France. Normandy & Paris.

26—**Goblins & Gears. teamwench.org/msfb.** Michael's 8th Ave., Glen Burnie MD. Steampunk-themed Halloween fantasy ball.

NOVEMBER 2013

1-3—**HonorCon. honorcon.com.** Greenville SC. David Weber. 20th Anniversary of Weber's *Honor Harrington* series.

1-3—**AlbaCon, Box 2085, Albany NY 12220. albacon.org.** Residence Inn, Saratoga NY. Low-key relax-a-con in the Adirondacks.

1-3—**OctopodiCon. octopodicon.org.** Embassy Suites, Norman OK. Steampunk (remember the movie *The Wild Wild West?)*

1-3—**NekoCon, c/o 26 Towne Center Way #803, Hampton VA 23666. nekocon.com.** Hampton Roads VA. Anime.

1-3—**World Fantasy Con. wfc2013.org.** Brighton UK. Richard Matheson (IM), R. C. Matheson, Alan Lee, China Miéville. Dark fantasy

AUGUST 2014

14-18—**LonCon 3, 379 Myrtle Rd., Sheffield S2 3HQ, UK. loncon3.org.** Docklands, London UK. The WorldCon. £105/A,C,US$170.

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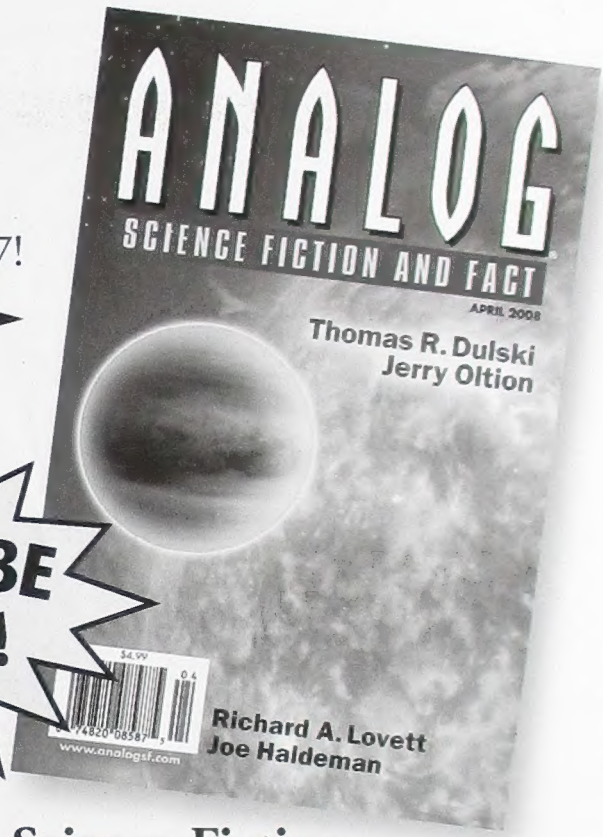

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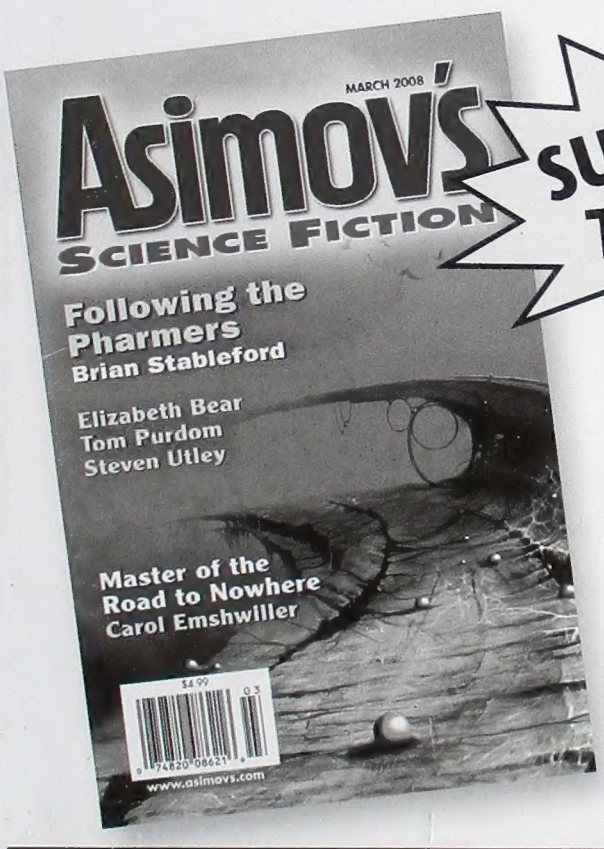

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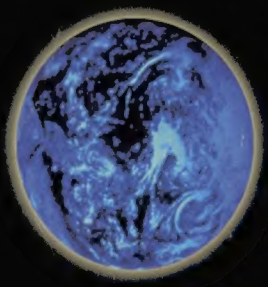

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